



THE MEMPHIS DEPOT TENNESSEE

ADMINISTRATIVE RECORD COVER SHEET

AR File Number 669

Part II of II

Data File: \\QPITPA02\D\chem\gc1.i\5100.b\A-A50304.D
Report Date: 23-Aug-2000 08:14

669 608

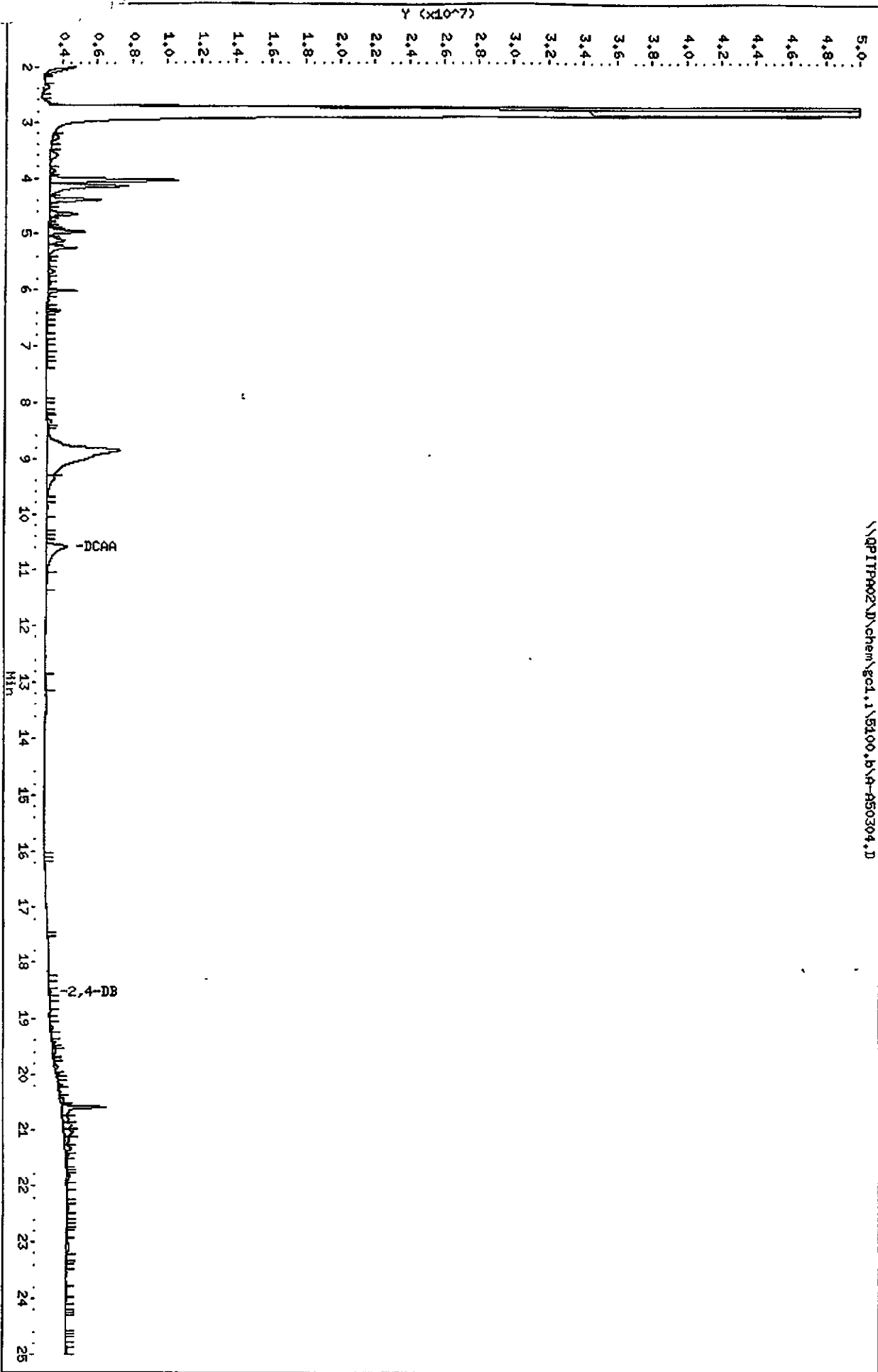
QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- R - Spike/Surrogate failed recovery limits.

Data File: \\QPITP002\chem\gc1.1\5100.b\A-850304.D
Date: 22-AUG-2000 19:15

Client ID: BLK
Sample Info: DJ6H3104, 5100.b
Volume Injected (uL): 1.0
Column Phase: DB608

Instrument: gc1.i
Operator: 01797
Column diameter: 0.53



609 699

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH210000 431

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 08/16/00

Work Order: DJ6M3102

Date Extracted: 08/21/00

Dilution factor: 1

Date Analyzed: 08/22/00

Moisture %: NA

QC Batch: 0234431

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.129	
93-72-1	2,4,5-TP (Silvex)	0.0337	

669 611

Data File: \\QPITPA02\D\chem\gc1.i\5100.b\A-A50303.D

Report Date: 23-Aug-2000 08:14

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5100.b\A-A50303.D
 Lab Smp Id: DJ6M3102 Client Smp ID: LCS
 Inj Date : 22-AUG-2000 18:46
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DJ6M3102,5100.b
 Misc Info : 160154LCS
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5100.b\LONGH.m
 Meth Date : 23-Aug-2000 08:11 colussyj Quant Type: ESTD
 Cal Date : 10-AUG-2000 12:15 Cal File: A-A50107.D
 Als bottle: 16 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC085

Concentration Formula: Amt * DF * 20*Vt/Vo/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10.000	Volume of final extract (uL)
Vo	100.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

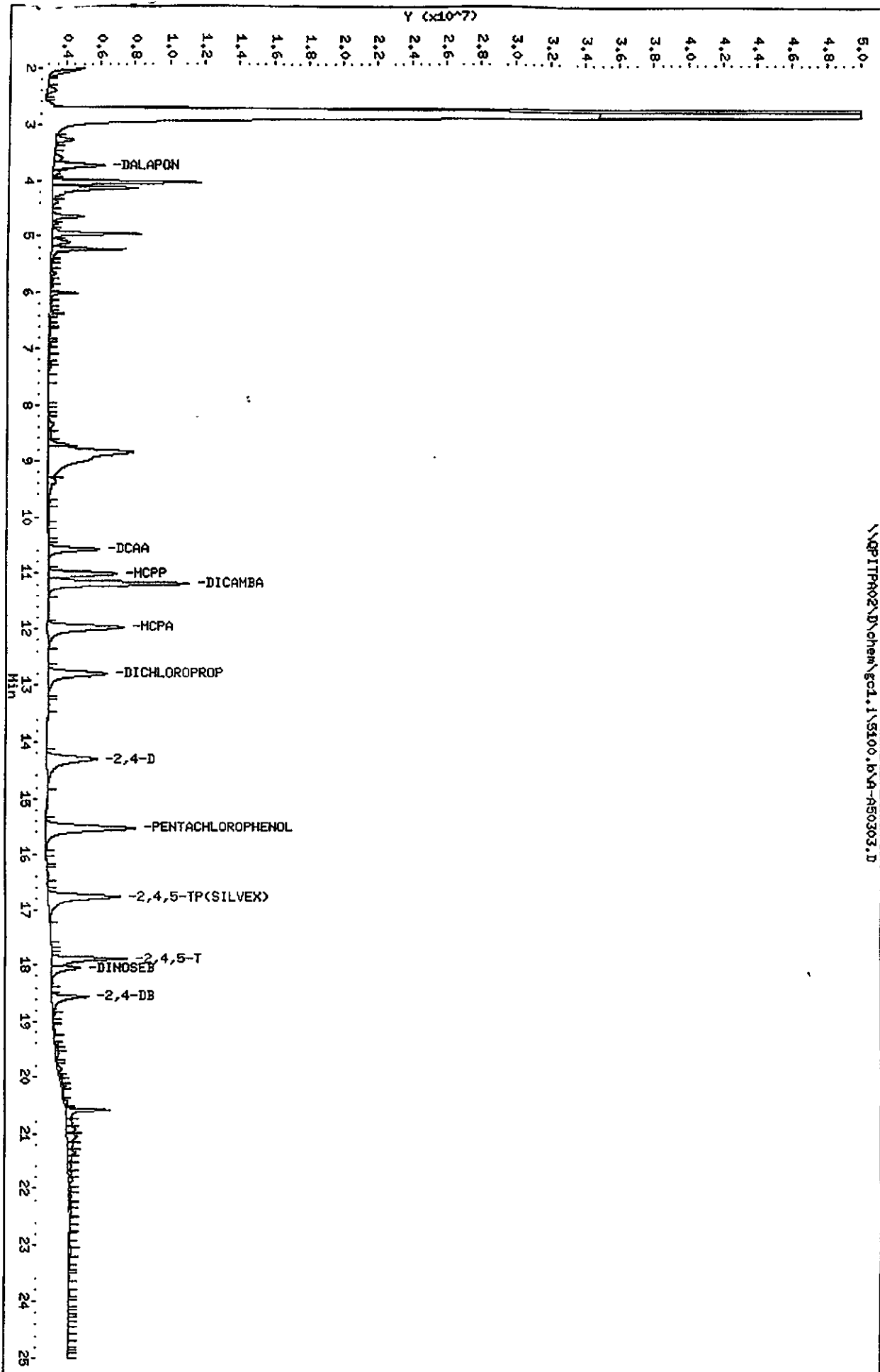
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON	3.731	3.732	-0.001	2950339	0.03305	0.06610 (aR)
2 DCAA	10.576	10.572	0.004	15041476	0.04667	0.09334 (aR)
3 MCPP	11.011	11.013	-0.002	3967489	7.92647	15.85
4 DICAMBA	11.187	11.182	0.005	8083754	0.03512	0.07024 (a)
5 MCPA	11.975	11.970	0.005	4376856	7.75953	15.52
6 DICHLOROPROP	12.806	12.801	0.005	3423619	0.06944	0.1389 (a)
7 2,4-D	14.309	14.306	0.003	2877826	0.06460	0.1292 (aR)
8 PENTACHLOROPHENOL	15.530	15.528	0.002	5103503	0.00916	0.01832 (a)
9 2,4,5-TP(SILVEX)	16.761	16.763	-0.002	31008771	0.01683	0.03366 (aR)
10 2,4,5-T	17.888	17.886	0.002	21570738	0.01607	0.03214 (aR)
11 DINOSEB	18.059	18.064	-0.005	9670612	0.00686	0.01372 (a)
12 2,4-DB	18.563	18.563	0.000	11465485	0.06259	0.1252 (a)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- R - Spike/Surrogate failed recovery limits.

Data File: \\QPIITP002\chem\gcl.1\5100.b\A-A50303.D
 Date: 22-AUG-2000 18:46
 Client ID: LCS
 Sample Info: D36H3402,5100.b
 Volume Injected (uL): 1.0
 Column phase: DB608

Instrument: gcl.1
 Operator: 01797
 Column diameter: 0.53



619 699

UXB INTERNATIONAL
MATRIX SPIKE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH160154 001

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 08/16/00

Work Order: DHX40117

Date Extracted: 08/21/00

Dilution factor: 1

Date Analyzed: 08/22/00

Moisture %: 20

QC Batch: 0234431

Client Sample Id: DF/S1/0228/SDC/026

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.121	
93-72-1	2,4,5-TP (Silvex)	0.0311	

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Data File: \\QPITPA02\D\chem\gc1.i\5100.b\A-A50301.D
 Report Date: 23-Aug-2000 08:13

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5100.b\A-A50301.D
 Lab Smp Id: DHX40117 Client Smp ID: DF/S1/0228/SDC/026M
 Inj Date : 22-AUG-2000 17:49
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DHX40117,5100.b
 Misc Info : 16015401MS
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5100.b\LONGH.m
 Meth Date : 23-Aug-2000 08:11 colussyj Quant Type: ESTD
 Cal Date : 10-AUG-2000 12:15 Cal File: A-A50107.D
 Als bottle: 14 QC Sample: MS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC085

Concentration Formula: Amt * DF * 20*Vt/Vo/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10.000	Volume of final extract (uL)
Vo	100.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

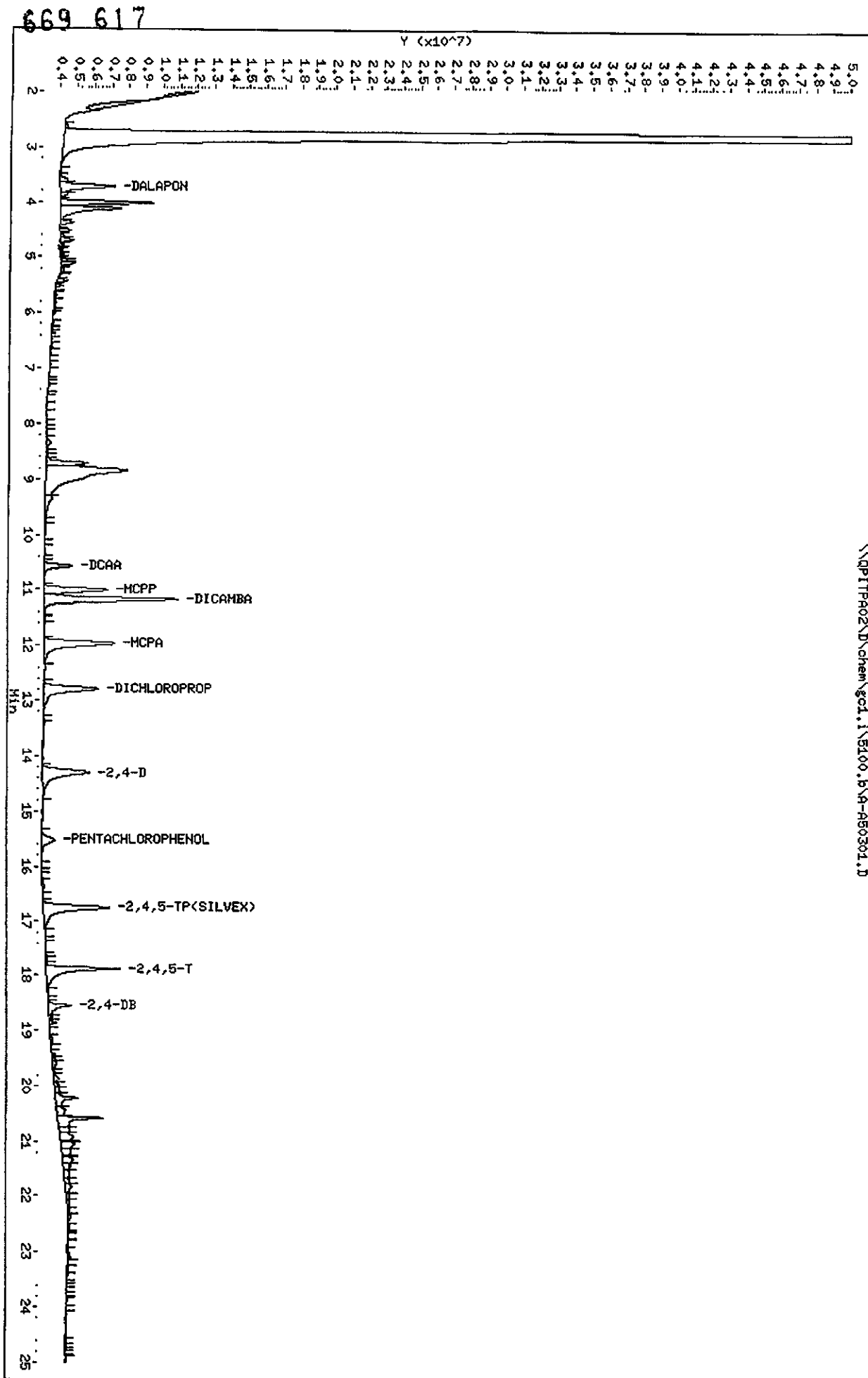
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON	3.732	3.732	0.000	3206488	0.03592	0.07183 (aR)
\$ 2 DCAA	10.572	10.572	0.000	8377689	0.02599	0.05199 (aR)
3 MCPP	11.012	11.013	-0.001	3662431	7.31701	14.63
4 DICAMBA	11.183	11.182	0.001	7770154	0.03376	0.06752 (a)
5 MCPA	11.971	11.970	0.001	4110345	7.28704	14.57
6 DICHLOROPROP	12.797	12.801	-0.004	3127296	0.06343	0.1269 (a)
7 2,4-D	14.310	14.306	0.004	2700418	0.06062	0.1212 (aR)
8 PENTACHLOROPHENOL	15.526	15.528	-0.002	769175	0.00138	0.002762 (a)
9 2,4,5-TP (SILVEX)	16.755	16.763	-0.008	28618091	0.01553	0.03107 (aR)
10 2,4,5-T	17.885	17.886	-0.001	24840738	0.01851	0.03701 (aR)
11 DINOSEB	Compound Not Detected.					
12 2,4-DB	18.560	18.563	-0.003	7167564	0.03913	0.07826 (a)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- R - Spike/Surrogate failed recovery limits.

Data File: \NPITPA02\chem\gcl.i\5100.b\A-A50301.D
 Date: 22-AUG-2000 17:49
 Client ID: DF/S1/0228/SDC/0264
 Sample Info: DHX40117,5100.b
 Volume Injected (uL): 1.0
 Column phase: DB608

Instrument: gcl.i
 Operator: 01797
 Column diameter: 0.53



UXB INTERNATIONAL
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H160154 001

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 08/16/00

Work Order: DHX40118

Date Extracted: 08/21/00

Dilution factor: 1

Date Analyzed: 08/22/00

Moisture %: 20

QC Batch: 0234431

Client Sample Id: DF/S1/0228/SDC/026

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.120	
93-72-1	2,4,5-TP (Silvex)	0.0305	

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Data File: \\QPITPA02\D\chem\gc1.i\5100.b\A-A50302.D
 Report Date: 23-Aug-2000 08:37

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5100.b\A-A50302.D
 Lab Smp Id: DHX40118 Client Smp ID: DF/S1/0228/SDC/026M
 Inj Date : 22-AUG-2000 18:17
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DHX40118,5100.b
 Misc Info : 16015401MSD
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5100.b\LONGH.m
 Meth Date : 23-Aug-2000 08:11 colussyj Quant Type: ESTD
 Cal Date : 10-AUG-2000 12:15 Cal File: A-A50107.D
 Als bottle: 15 QC Sample: MSD
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC085

Concentration Formula: Amt * DF * 20*Vt/Vo/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10.000	Volume of final extract (uL)
Vo	100.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON	3.731	3.732	-0.001	3150293	0.03529	0.07057 (aR)
2 DCAA	10.573	10.572	0.001	7672997	0.02381	0.04762 (aR)
3 MCPP	11.011	11.013	-0.002	3539401	7.07121	14.14
4 DICAMBA	11.189	11.182	0.007	7575633	0.03291	0.06583 (a)
5 MCPA	11.969	11.970	-0.001	4006408	7.10278	14.20
6 DICHLOROPROP	12.803	12.801	0.002	3017268	0.06120	0.1224 (a)
7 2,4-D	14.307	14.306	0.001	2663277	0.05978	0.1196 (aR)
8 PENTACHLOROPHENOL	15.535	15.528	0.007	698779	0.00125	0.002509 (a)
9 2,4,5-TP (SILVEX)	16.752	16.763	-0.011	28112520	0.01526	0.03052 (aR)
10 2,4,5-T	17.887	17.886	0.001	23201977	0.01729	0.03457 (aR)
11 DINOSBB				Compound Not Detected.		
12 2,4-DB	18.564	18.563	0.001	6782732	0.03703	0.07406 (a)

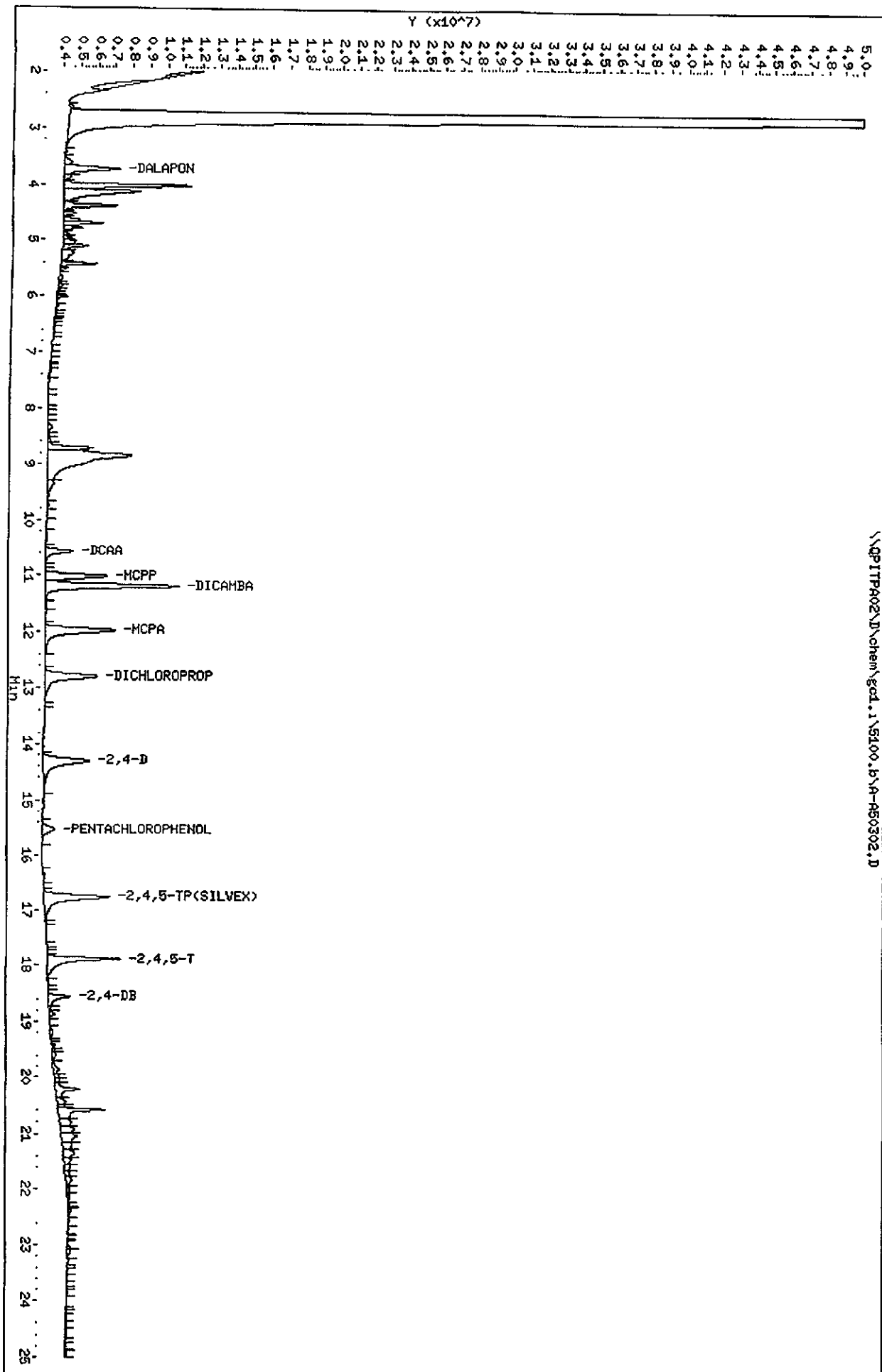
Data File: \\QPITPA02\D\chem\gc1.i\5100.b\A-A50302.D
Report Date: 23-Aug-2000 08:37

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- R - Spike/Surrogate failed recovery limits.

Data File: \\QPITPA02\chem\gcd.1\5100.b\A-850302.D
Date: 22-AUG-2000 18:17
Client ID: DF/SL/0228/SDC/026H
Sample Info: DHX40118,5100.b
Volume Injected (uL): 1.0
Column phase: DB608

Instrument: gcd.1
Operator: 01797
Column diameter: 0.53



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**HERBICIDE
MISCELLANEOUS**



QUA-4181		Elkay Lab H 8320901W		Serial Number 085		Log Book Number 96-MT-5	
By James O. Murphy		Date 8-17-00		pH Instrument Accumulator		Balance	
Project Number		Lot Number CCH 160154		Solution Number 1 - Log Book Number 204497-13		Solution Number 2 - Log Book Number	
				Client Codes		C94817	

Fluid Determination				TCLP Extraction						
Sample ID	Wgt/Vol	Init. pH	Final pH	Extract Fluid #1, or #2	Conc.: HNO3 to Acidity (for Metals)	Sample ID	Wgt (g) Wet/Dry	Fluid Vol.	Glass	Final pH A Tumbling
DHX40	500g / 96.5ml	5.49	1.91	Silica	10m	1. PB-TCLP	—	2000ml	—	4.93
DHX47	↓	5.51	1.96	↓	↓	2. DHX40	100.0g	↓	↓	5.05
DHX4A	↓	5.59	1.67	↓	↓	3. ↓	↓	↓	↓	5.08
DJ00L	↓	5.75	1.79	↓	↓	4. DHX47	↓	↓	↓	5.09
	↓				↓	5. DHX4A	↓	↓	↓	5.04
	↓					6. DJ00L	↓	↓	↓	5.53
	↓					7.				
	↓					8.				
	↓					9.				
	↓					10				
	↓					11				
	↓					12.				
	↓					13.				

[illegible]

* = Sample determined to have free-liquid, % solid determination was performed.

<5 = Extraction Fluid No. 1 5.7 mL Glacial Acetic Acid dil 500 mL + 64.3 mL of 1N Na OH dil to 1L (pH 4.93 + 0.05)

>5 = Extraction Fluid No. 2 5.7 mL Glacial Acetic Acid dil to 1L (pH 2.88 + 0.05)

Room temp = 21° pH E.F. = 4.98

Date/Time On	Date/Time Off	Agitation Apparatus RPMs:		
8-17-00 1:00	8-18-00	30 ± 2	J.M. - 507K	
	pH Calibration	(4.0)	(7.0)	(10.0)
Date 8-17-00		4.01	7.02	10.05
Date 8-18-00		4.00	7.02	10.05
Comments				

Created: DE 8-10-00

Sequence Table (Front Injector):

Vial Information Part:

Line Vial Vial Information

Line	Vial	Vial Information
1	1	8151 HERB ANALYSIS
2	2	190-94-1 103
3	3	190-94-2
4	4	190-94-3 105
5	5	190-94-4
6	6	190-94-5
7	7	~~040131001~~
8	8	~~040131001B~~
9	9	~~040131001D~~ 110
10	10	~~040131002~~
11	11	040131003 ✓
12	12	040131004 ✓
13	13	040131005 ✓
14	14	~~040131006~~ 115
15	15	040131007 ✓
16	16	040131BLK ✓
17	17	~~040131LCS~~
18	18	~~260154LCS~~
19	19	260154006 120 ✓
20	20	270298001 ✓
21	21	270298002 ✓
22	22	270298003 ✓
23	23	270298004 ✓
24	24	270298005 125 ✓
25	25	270298006 ✓

Line	Vial	Vial Information
====	====	=====
26	26	270298007 ✓
27	27	190-94-3
28	28	280117001 ✓ 129
29	29	270269001 X5
30	30	280199001 X10
31	31	250149002 X2
32	32	270270002 X2
33	33	270278002 X2
34	34	280173002 X2
35	35	250149BLK
36	36	250149LCS
37	37	250149LCD
38	38	190-94-3 139
39	1	RINSE

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
====	====	=====	=====	==	=====	=====	=====
1	1	HEXANE	HERB	1	Sample		
2	2	Lherb,5100.b	HERB	1	Sample		
3	3	MLherb,5100.b	HERB	1	Sample		
4	4	Mherb,5100.b	HERB	1	Sample		
5	5	MHherb,5100.b	HERB	1	Sample		
6	6	Hherb,5100.b	HERB	1	Sample		
7	7	DHD4P102,5100.b	HERB	1	Sample		
8	8	DHD4P103,5100.b	HERB	1	Sample		
9	9	DHD4P104,5100.b	HERB	1	Sample		
10	10	DHD4V102,5100.b	HERB	1	Sample		
11	11	DHD4W103,5100.b	HERB	1	Sample		
12	12	DHD50103,5100.b	HERB	1	Sample		
13	13	DHD51103,5100.b	HERB	1	Sample		
14	14	DHD53103,5100.b	HERB	1	Sample		
15	15	DHD56103,5100.b	HERB	1	Sample		
16	16	DHGWL101,5100.b	HERB	1	Sample		
17	17	DHGWL102,5100.b	HERB	1	Sample		
18	18	DH6JA102,5100.b	HERB	1	Sample		
19	19	DGTC2110,5100.b	HERB	1	Sample		
20	20	DG XK5110,5100.b	HERB	1	Sample		
21	21	DG XKA110,5100.b	HERB	1	Sample		
22	22	DG XKC110,5100.b	HERB	1	Sample		
23	23	DG XKM110,5100.b	HERB	1	Sample		

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Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
====	====	=====	=====	===	=====	=====	=====
24	24	DGXXKP110,5100.b	HERB	1	Sample		
25	25	DGXXKQ110,5100.b	HERB	1	Sample		
26	26	DGXXKR110,5100.b	HERB	1	Sample		
27	27	Mherb,5100.b	HERB	1	Sample		
28	28	DH0JA110,5100.b	HERB	1	Sample		
29	29	DGXDR11D,5100.b	HERB	1	Sample		
30	30	DH16L11D,5100.b	HERB	1	Sample		
31	31	DGQ6710U,5100.b	HERB	1	Sample		
32	32	DGXED10U,5100.b	HERB	1	Sample		
33	33	DGXFC10U,5100.b	HERB	1	Sample		
34	34	DH12K10U,5100.b	HERB	1	Sample		
35	35	DH6HW101,5100.b	HERB	1	Sample		
36	36	DH6HW102,5100.b	HERB	1	Sample		
37	37	DH6HW103,5100.b	HERB	1	Sample		
38	38	Mherb,5100.b	HERB	1	Sample		
39	1	HEXANE	HERB	1	Sample		

Sequence Table (Back Injector):

Vial Information Part:

Line	Vial	Vial Information
====	====	=====
1	100	8151 HERB ANALYSIS
2	1	RINSE
3	2	190-94-1 108
4	3	190-94-2
5	4	190-94-3
6	5	190-94-4
7	6	190-94-5
8	7	040131001
9	8	040131001S
10	9	040131001D
11	10	040131002
12	11	040131003
13	12	040131004
14	13	040131005
15	14	040131006
16	15	040131007

DE
8-10-00

Sequence Table (Front Injector):

Vial Information Part:

Line	Vial	Vial Information	
====	====	=====	=====
1	100	8151/515 HERB ANALYSIS	
2	1	8151/515 HERB ANALYSIS	
3	2	190-94-3	289
4	3	09013303 500XDL	290
5	4	09013305 200XDL	291
6	5	190-94-3	292
7	6	18011901	293
8	7	180119LCS	294
9	8	180119LCSD	295
10	9	180119BLK	296 ✓
11	10	16015401	297 ✓
12	11	16015402	298 ✓
13	12	16015403	299 ✓
14	13	17011301	300 34
15	14	16015401MS	301 ✓
16	15	16015401MSD ✓	302 ✓
17	16	160154LCS	303 ✓
18	17	160154BLK	304 ✓
19	18	~~16015402~~	~~305~~
20	19	190-94-3	306

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
====	====	=====	=====	===	=====	=====	=====
1	100	HEXANE	HERB	1	Sample		
2	1	HEXANE	HERB	1	Sample		
3	2	MHERB,5100.b	HERB	1	Sample		
4	3	DHK11101,5100.b	HERB	1	Sample		
5	4	DHK1D101,5100.b	HERB	1	Sample		

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Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
====	====	=====	=====	==	=====	=====	=====
6	5	MHERB,5100.b	HERB	1	Sample		
7	6	DJ371102,5100.b	HERB	1	Sample		
8	7	DJ5JP102,5100.b	HERB	1	Sample		
9	8	DJ5JP103,5100.b	HERB	1	Sample		
10	9	DJ5JP101,5100.b	HERB	1	Sample		
11	10	DHX40105,5100.b	HERB	1	Sample		
12	11	DHX47105,5100.b	HERB	1	Sample		
13	12	DHX4A105,5100.b	HERB	1	Sample		
14	13	DJ0QL105,5100.b	HERB	1	Sample		
15	14	DHX40117,5100.b	HERB	1	Sample		
16	15	DHX40118,5100.b	HERB	1	Sample		
17	16	DJ6M3102,5100.b	HERB	1	Sample		
18	17	DJ6M3101,5100.b	HERB	1	Sample		
19	18	DHX47105,5100.b	HERB	1	Sample		
20	19	MHERB,5100.b	HERB	1	Sample		

Sequence Table (Back Injector):

Vial Information Part:

Line	Vial	Vial Information
====	====	=====
1	1	8151/515 HERB ANALYSIS
2	2	190-94-3
3	3	09013303 500XDL
4	4	09013305 200XDL
5	5	190-94-3

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
====	====	=====	=====	==	=====	=====	=====
1	1	HEXANE	HERBA	1	Sample		
2	2	MHERB,5100A.b	HERBA	1	Sample		
3	3	DHK11101,5100A.b	HERBA	1	Sample		
4	4	DHK1D101,5100A.b	HERBA	1	Sample		
5	5	MHERB,5100A.b	HERBA	1	Sample		

REQUESTED BY: YUSHINSC

METHOD: QS Herbicides (8151A)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
1A,B CLP1	DHX40-1-05	___	260755	399411	A-64-QS	COH160154	001		SOLID	0	3
1A,B CLP1	DHX47-1-05	___	260756	399411	A-64-QS	COH160154	002		SOLID	0	3
1A,B CLP1	DHX4A-1-05	___	260757	399411	A-64-QS	COH160154	003		SOLID	0	3
1E CLP1	DJOQL-1-05	___	260758	399411	A-64-QS	COH170113	001		SOLID	0	3

RELINQUISHED BY

P. Yushinski
P. Yushinski

RECEIVED BY

P. Yushinski
P. Yushinski

DATE/TIME

8-21-00 15:38
8-21-00 19:36

***** END OF REPORT *****

669 631

METALS DATA

STL-Pittsburgh**Cover Page - Inorganic Analysis Data Package**

<u>Client ID</u>	<u>Lab Sample ID:</u>
<u>DF/S1/0228/SDC/026</u>	<u>DHX40</u>
<u>DF/S1/0228/SDC/026D</u>	<u>DHX40D</u>
<u>DF/S1/0228/SDC/026S</u>	<u>DHX40S</u>
<u>DF/S1/0228/SDC/027</u>	<u>DHX47</u>
<u>DF/S1/0228/SDC/028</u>	<u>DHX4A</u>

Comments: UXB DUNN FIELD
COH160154
6010B

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than conditions detailed above. Release of the data combined in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____

Name: _____

Date: _____

Title: _____

REVIEWED BY: MTW
DATE: 8-29-00

669 633

**METALS
RESULTS**

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DHX40 Client ID: DF/S1/0228/SDC/026
Matrix: Soil Units: mg/kg Prep Date: 8/28/00 Prep Batch: 0241105
Weight: 1.00 Volume: 100 Percent Moisture: 20.33

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.32	1.3	9.5		1	ICPST	8/28/00	14:26

Comments: Lot #: C0H160154 Sample #: 1

Version 4.10.2

U Result is less than the MDL
B Result is between MDL and RL

Form 1 Equivalent

669 635

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DHX47 Client ID: DF/S1/0228/SDC/027
Matrix: Soil Units: mg/kg Prep Date: 8/28/00 Prep Batch: 0241105
Weight: 1.00 Volume: 100 Percent Moisture: 21.04

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.32	1.3	10.5		1	ICPST	8/28/00	14:42

Comments: Lot #: C0H160154 Sample #: 2

Version 4.10.2

U Result is less than the MDL
B Result is between MDL and RL

Form I Equivalent

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DHX4A **Client ID:** DF/S1/0228/SDC/028
Matrix: Soil **Units:** mg/kg **Prep Date:** 8/28/00 **Prep Batch:** 0241105
Weight: 1.00 **Volume:** 100 **Percent Moisture:** 15.01

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.30	1.2	9.0		1	ICPST	8/28/00	14:47

Comments: Lot #: C0H160154 Sample #: 3

Version 4.10.2

U Result is less than the MDL
B Result is between MDL and RL

Form 1 Equivalent

STL-Pittsburgh

669 637

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICPST

Units: ug/L

Chart Number: T00828B.ARC

Acceptable Range: 90% - 110%

Standard Source: Inorganic Ventures

Standard ID: 0057-022-8

Element	WL/ Mass	True Conc	ICV3-1 8/28/00 10:52 AM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	250.0	256.43	102.6								

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPSTUnits: ug/LChart Number: T00828B.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0057-040-1

Element	WL/ Mass	True Conc	CCV3-1 8/28/00 11:45 AM		CCV3-2 8/28/00 12:35 PM		CCV3-3 8/28/00 1:25 PM		CCV3-4 8/28/00 2:02 PM		CCV3-5 8/28/00 2:51 PM	
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	500.0	523.76	104.8	515.83	103.2	523.03	104.6	520.62	104.1	522.33	104.5

669 639

STL-Pittsburgh
Metals Data Reporting Form

Initial Calibration Blank Results**Instrument:** ICPST**Units:** ug/L**Chart Number:** T00828B.ARC**Standard Source:** _____**Standard ID:** _____

			ICB1 8/28/00 10:56 AM						
Element	WL/ Mass	Report Limit	Found	Q	Found	Q	Found	Q	Found Q
Arsenic	189.042	10	2.6	U					

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPSTUnits: ug/LChart Number: T00828B.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 8/28/00 11:49 AM		CCB2 8/28/00 12:39 PM		CCB3 8/28/00 1:29 PM		CCB4 8/28/00 2:06 PM		CCB5 8/28/00 2:55 PM	
			Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	189.042	10	2.6	U	2.6	U	2.6	U	2.6	U	2.6	U

669 641

STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DJGQ8BMatrix: Soil Units: mg/kg Prep Date: 8/28/00 Prep Batch: 0241105Weight: 1.00 Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.042	0.26	1.0	0.26	U	1	ICPST	8/28/00	14:17

Comments: Lot #: C0H160154

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICPSTUnits: ug/LChart Number: T00828B.ARCAcceptable Range: 0% - 0%Standard Source: Inorganic VenturesStandard ID: 0057-011-1

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 8/28/00 11:00 AM				
				Found	Found	Found	Found	Found
Arsenic	189.042	10		1				

STL-Pittsburgh

669 643

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPSTUnits: ug/LChart Number: T00828B.ARCAcceptable Range: 80% - 120%Standard Source: Inorganic VenturesStandard ID: 0014-197-7

Element	WL/ Mass	True Conc	ICSAB 8/28/00 11:05 AM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	1000	1011.6	101.2								

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DHX40S
 Original Sample ID: DHX40 Client ID: DF/S1/0228/SDC/026S
 Matrix: Soil Units: mg/kg Prep Date: 8/28/00 Prep Batch: 0241105
 Weight: 1.00 Volume: 100 Percent Moisture: 20.33

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Arsenic	189.0	9.5		239		251.04	91.3	1	1	ICPST	8/28/00	14:26	8/28/00	14:34

Comments: Lot #: C0H160154 Sample #: 1

Version 4.10.2

U Result is less than the MDL
 B Result is between MDL and RL
 N Spike recovery failed
 NC Percent recovery was not calculated
 * Duplicate analysis RPD was not within limits

Form 5A Equivalent

669 645

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: DHX40D
 Original Sample ID: DHX40 Client ID: DF/S1/0228/SDC/026D
 Matrix: Soil Units: mg/kg Prep Date: 8/28/00 Prep Batch: 0241105
 Weight: 1.00 Volume: 100 Percent Moisture: 20.33

Element	WL/ Mass	OS Conc	Q	MSD Conc	Q	Spike Level	% Rec	OS DF	MSD DF	Instr	OS Anal Date	OS Anal Time	MSD Anal Date	MSD Anal Time
Arsenic	189.0	9.5		243		251.04	93.2	1	1	ICPST	8/28/00	14:26	8/28/00	14:38

Comments: Lot #: C0H160154 Sample #: 1

Version 4.10.2

U Result is less than the MDL
 B Result is between MDL and RL
 N Spike recovery failed
 NC Percent recovery was not calculated
 * Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: DHX40DMatrix Spike Sample ID: DHX40S Client ID: DF/S1/0228/SDC/026DMatrix: Soil Units: mg/kg Prep Date: 8/28/00 Prep Batch: 0241105Weight: 1.00 Volume: 100 Percent Moisture: 20.33

Element	WL/ Mass	MS Conc	Q	MSD Conc	Q	RPD	MS DF	MSD DF	Instr	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Arsenic	189.042	239		243		2.0 %	1	1	ICPST	8/28/00	14:34	8/28/00	14:38

Comments: Lot #: C0H160154 Sample #: 1

Version 4.10.2

U Result is less than the MDL
 B Result is between MDL and RL
 N Spike recovery failed
 NC Percent recovery was not calculated
 * Duplicate analysis RPD was not within limits

Form 6 Equivalent

669 647

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DJGQ8CMatrix: Soil Units: mg/kg Prep Date: 8/28/00 Prep Batch: 0241105Weight: 1.00 Volume: 100 Percent Moisture: NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Arsenic	189.042	200	205	102.5		80-120	1	ICPST	8/28/00	14:22

Comments: Lot #: C0H160154

Version 4.10.2

STL Pittsburgh

U Result is less than the MDL

B Result is between MDL and RL

Form 7 Equivalent

5017

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: DHX40POriginal Sample ID: DHX40 Client ID: DF/S1/0228/SDC/026Matrix: Soil Units: mg/kg Prep Date: 8/28/00 Prep Batch: 0241105Weight: 1.00 Volume: 100 Percent Moisture: 20.33

Element	WL/ Mass	OS Conc	Q	Serial Dilution Conc	Q	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Arsenic	189.042	9.5		10.8			1	5	ICPST	8/28/00	14:26	8/28/00	14:30

Comments: _____

STL-Pittsburgh

669 649

Metals Data Reporting Form**Instrument Detection Limits**

Instrument: ICPST**Units:** ppb

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Arsenic	189.04	10	2.6	4/1/00

Metals Data Reporting Form

Inter-Element Correction Factors

Instrument: ICPST

Date of IEC's: 8/1/00

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	Pb(0.00055), Se(0.00001), Tl(-0.00002)
Aluminum	308.215	Pb(-0.000197), Se(0.000011)
Chromium	267.716	Sb(0.007006)
Chromium	267.716	As(-0.002615), Sb(0.012173)
Cobalt	228.616	Se(-0.000381)
Cobalt	228.616	Cd(-0.00009), Fe(0.089705), Ni(-0.00066), Pb(0.000077), Se(0.000351), Tl(0.002179)
Iron	271.441	Cd(0.000088), Pb(0.000086), Sb(0.000019), Se(-0.000016), Tl(-0.000034), V(-0.000349), Zn(0.000127)
Iron	271.441	Pb(0.000047), Sb(0.000021), Se(-0.00029)
Magnesium	279.078	Fe(-0.000306)
Manganese	257.61	Se(0.000579), Tl(-0.004577)
Molybdenum	202.03	Pb(-0.00087), Sb(-0.010184)
Molybdenum	202.03	Al(0.011136), As(-0.000847), Cr(-0.000312), Pb(-0.000331), Sb(-0.003352)
Nickel	231.604	Pb(0.000274), Sb(-0.000886), Zn(0.004694)
Nickel	231.604	Pb(0.000086)
Vanadium	292.402	Al(0.019591), Be(-0.00787), Cr(-0.000183), Fe(0.007812), Sb(-0.008005), Se(0.000216), Tl(0.001386)
Vanadium	292.402	Pb(-0.000428), Se(0.000099)

669 651

STL-Pittsburgh
Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICPST

Units: ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Arsenic	189.04	10000	6/15/00

Metals Data Reporting Form

Preparation Log

Preparation Batch: 0241105 Instrument: ICP Matrix: Soil

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DJGQ8B	8/28/00	1.00	100	NA
DJGQ8C	8/28/00	1.00	100	NA
DHX40	8/28/00	1.00	100	20.33
DHX40D	8/28/00	1.00	100	20.33
DHX40S	8/28/00	1.00	100	20.33
DHX47	8/28/00	1.00	100	21.04
DHX4A	8/28/00	1.00	100	15.01

669 653

STL-Pittsburgh
Metals Data Reporting Form

Instrument RunlogInstrument: ICPSTChart Number: T00828B.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		8/28/00	9:52
ZZZZZZ		8/28/00	9:59
ZZZZZZ		8/28/00	10:07
ZZZZZZ		8/28/00	10:22
ZZZZZZ		8/28/00	10:26
ZZZZZZ		8/28/00	10:30
STD1		8/28/00	10:40
STD6		8/28/00	10:44
STD7		8/28/00	10:48
ICV3-1		8/28/00	10:52
ICB1		8/28/00	10:56
ICSA		8/28/00	11:00
ICSAB		8/28/00	11:05
ZZZZZZ		8/28/00	11:11
ZZZZZZ		8/28/00	11:15
ZZZZZZ		8/28/00	11:19
ZZZZZZ		8/28/00	11:24
ZZZZZZ		8/28/00	11:28
ZZZZZZ		8/28/00	11:32
ZZZZZZ		8/28/00	11:37
ZZZZZZ		8/28/00	11:41
CCV3-1		8/28/00	11:45
CCB1		8/28/00	11:49
ZZZZZZ		8/28/00	11:53
ZZZZZZ		8/28/00	11:58
ZZZZZZ		8/28/00	12:02
ZZZZZZ		8/28/00	12:06
ZZZZZZ		8/28/00	12:10
ZZZZZZ		8/28/00	12:14
ZZZZZZ		8/28/00	12:18
ZZZZZZ		8/28/00	12:22
ZZZZZZ		8/28/00	12:27
ZZZZZZ		8/28/00	12:31
CCV3-2		8/28/00	12:35
CCB2		8/28/00	12:39
ZZZZZZ		8/28/00	12:43
ZZZZZZ		8/28/00	12:47
ZZZZZZ		8/28/00	12:52
ZZZZZZ		8/28/00	12:56

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPSTChart Number: T00828B.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		8/28/00	13:00
ZZZZZZ		8/28/00	13:04
ZZZZZZ		8/28/00	13:08
ZZZZZZ		8/28/00	13:12
ZZZZZZ		8/28/00	13:16
ZZZZZZ		8/28/00	13:21
CCV3-3		8/28/00	13:25
CCB3		8/28/00	13:29
ZZZZZZ		8/28/00	13:33
ZZZZZZ		8/28/00	13:37
ZZZZZZ		8/28/00	13:41
ZZZZZZ		8/28/00	13:46
ZZZZZZ		8/28/00	13:50
ZZZZZZ		8/28/00	13:54
ZZZZZZ		8/28/00	13:58
CCV3-4		8/28/00	14:02
CCB4		8/28/00	14:06
DJGQ8B		8/28/00	14:17
DJGQ8C		8/28/00	14:22
DHX40	DF/S1/0228/SDC/026	8/28/00	14:26
DHX40P	DF/S1/0228/SDC/026	8/28/00	14:30
DHX40S	DF/S1/0228/SDC/026S	8/28/00	14:34
DHX40D	DF/S1/0228/SDC/026D	8/28/00	14:38
DHX47	DF/S1/0228/SDC/027	8/28/00	14:42
DHX4A	DF/S1/0228/SDC/028	8/28/00	14:47
CCV3-5		8/28/00	14:51
CCB5		8/28/00	14:55
ZZZZZZ		8/28/00	14:59
ZZZZZZ		8/28/00	15:03
ZZZZZZ		8/28/00	15:07
ZZZZZZ		8/28/00	15:11
ZZZZZZ		8/28/00	15:16
ZZZZZZ		8/28/00	15:20
ZZZZZZ		8/28/00	15:24
ZZZZZZ		8/28/00	15:28
ZZZZZZ		8/28/00	15:32
ZZZZZZ		8/28/00	15:36

669 655

**METALS
RAW DATA**

COH160154

Analysis Report *WAB* Averages

08/28/00 03:52:11 PM

669 656

page 3

Sample Name *Phurged 8200* AS

1	STD1	-.01232
2	STD6	5.22142
3	STD7	
4	ICV3-1 0057-022-8	.25643
5	ICB1	-.00059
6	ICSA 0057-011-1	.00071
7	ICSAB 0014-197-7	1.0116
8	DHM0DB	.00073
9	DHM0DC	1.9521
10	DH1VQ	.00145
11	DH3P6	.00213
12	DH3P9	.00115
13	DH5A9	.20727
14	DH5AC	.01021
15	DHARW	.00477
16	CCV3-1 0057-040-1	.52376
17	CCB1	.00075
18	DHAV1	.00268
19	DHHRV	.00293
20	DHHT1	.00148
21	DHHT1P5	.00026
22	DHHT1S	2.0127
23	DHHT1D	1.9982
24	DHHT4	.00174
25	DHHT5	.00104
26	DHHT7	.00117
27	DH5A9/2 Fe,Mn	.11595
28	CCV3-2	.51583
29	CCB2	.00026
30	DJA2FB	.00005
31	DJA2FC	2.1199
32	DJ3EE	.00049
33	DJ3EEP5	.00149
34	DJ3EES	2.1065
35	DJ3EED	2.1193
36	DJ3EK	.00033
37	DJ3EM	.00114
38	DJ3EN	.00047
39	DJ3EQ	.00111
40	CCV3-3	.52303
41	CCB3	-.00075
42	DJ3ET	.00107
43	DJ3EV	.00242
44	DJ3F5	.00015
45	DJ3F7	.00188
46	DJ3F9	.00115
47	DJ3FA	.00000
48	DJ3FD	.00145
49	CCV3-4	.52062
50	CCB4	.00036
51	DJGQ8B	.00031
52	DJGQ8C	2.0492
53	DHX40	.07526

#	Sample Name	AS
54	DHX40P5	.01717
55	DHX40S	1.9014
56	DHX40D	1.9388
57	DHX47	.08268
58	DHX4A	.07655
59	CCV3-5	.52233
60	CCB5	.00100
61	DJGQAB	-.00019
62	DJGQAC	2.1648
63	DJENL	.06623
64	DJENLP5	.01354
65	DJENLS	1.9870
66	DJENLD	2.0082
67	DJENX	.10301
68	DJEP5	.04973
69	CCV3-6	.50397
70	CCB6	.00104

Analysis Report

Summary

08/28/00 03:52:11 PM

page 1

PK82800

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1	T00828B	METTRA	08/28/00	10:40		X	IR
2	STD6	T00828B	METTRA	08/28/00	10:44		X	IR
3	STD7	T00828B	METTRA	08/28/00	10:48		X	IR
4	ICV3-1 0057-022-8	T00828B	METTRA	08/28/00	10:52	RJG	S	CONC
5	ICB1	T00828B	METTRA	08/28/00	10:56	RJG	S	CONC
6	ICSA 0057-011-1	T00828B	METTRA	08/28/00	11:00	RJG	Q	CONC
7	ICSAB 0014-197-7	T00828B	METTRA	08/28/00	11:05	RJG	Q	CONC
8	DHM0DB	T00828B	METTRA	08/28/00	11:11	RJG	S	CONC
9	DHM0DC	T00828B	METTRA	08/28/00	11:15	RJG	S	CONC
10	DH1VQ	T00828B	METTRA	08/28/00	11:19	RJG	S	CONC
11	DH3P6	T00828B	METTRA	08/28/00	11:24	RJG	S	CONC
12	DH3P9	T00828B	METTRA	08/28/00	11:28	RJG	S	CONC
13	DH5A9	T00828B	METTRA	08/28/00	11:32	RJG	S	CONC
14	DH5AC	T00828B	METTRA	08/28/00	11:37	RJG	S	CONC
15	DHARW	T00828B	METTRA	08/28/00	11:41	RJG	S	CONC
16	CCV3-1 0057-040-1	T00828B	METTRA	08/28/00	11:45	RJG	S	CONC
17	CCB1	T00828B	METTRA	08/28/00	11:49	RJG	S	CONC
18	DHAV1	T00828B	METTRA	08/28/00	11:53	RJG	S	CONC
19	DHHRV	T00828B	METTRA	08/28/00	11:58	RJG	S	CONC
20	DHHT1	T00828B	METTRA	08/28/00	12:02	RJG	S	CONC
21	DHHT1P5	T00828B	METTRA	08/28/00	12:06	RJG	S	CONC
22	DHHT1S	T00828B	METTRA	08/28/00	12:10	RJG	S	CONC
23	DHHT1D	T00828B	METTRA	08/28/00	12:14	RJG	S	CONC
24	DHHT4	T00828B	METTRA	08/28/00	12:18	RJG	S	CONC
25	DHHT5	T00828B	METTRA	08/28/00	12:22	RJG	S	CONC
26	DHHT7	T00828B	METTRA	08/28/00	12:27	RJG	S	CONC
27	DH5A9/2 Fe,Mn	T00828B	METTRA	08/28/00	12:31	RJG	S	CONC
28	CCV3-2	T00828B	METTRA	08/28/00	12:35	RJG	S	CONC
29	CCB2	T00828B	METTRA	08/28/00	12:39	RJG	S	CONC
30	DJA2FB	T00828B	METTRA	08/28/00	12:43	RJG	S	CONC
31	DJA2FC	T00828B	METTRA	08/28/00	12:47	RJG	S	CONC
32	DJ3EE	T00828B	METTRA	08/28/00	12:52	RJG	S	CONC
33	DJ3EEP5	T00828B	METTRA	08/28/00	12:56	RJG	S	CONC
34	DJ3EES	T00828B	METTRA	08/28/00	13:00	RJG	S	CONC
35	DJ3EED	T00828B	METTRA	08/28/00	13:04	RJG	S	CONC
36	DJ3EK	T00828B	METTRA	08/28/00	13:08	RJG	S	CONC
37	DJ3EM	T00828B	METTRA	08/28/00	13:12	RJG	S	CONC
38	DJ3EN	T00828B	METTRA	08/28/00	13:16	RJG	S	CONC
39	DJ3EQ	T00828B	METTRA	08/28/00	13:21	RJG	S	CONC
40	CCV3-3	T00828B	METTRA	08/28/00	13:25	RJG	S	CONC
41	CCB3	T00828B	METTRA	08/28/00	13:29	RJG	S	CONC
42	DJ3ET	T00828B	METTRA	08/28/00	13:33	RJG	S	CONC
43	DJ3EV	T00828B	METTRA	08/28/00	13:37	RJG	S	CONC
44	DJ3F5	T00828B	METTRA	08/28/00	13:41	RJG	S	CONC
45	DJ3F7	T00828B	METTRA	08/28/00	13:46	RJG	S	CONC
46	DJ3F9	T00828B	METTRA	08/28/00	13:50	RJG	S	CONC
47	DJ3FA	T00828B	METTRA	08/28/00	13:54	RJG	S	CONC
48	DJ3FD	T00828B	METTRA	08/28/00	13:58	RJG	S	CONC
49	CCV3-4	T00828B	METTRA	08/28/00	14:02	RJG	S	CONC
50	CCB4	T00828B	METTRA	08/28/00	14:06	RJG	S	CONC
51	DJGQ8B	T00828B	METTRA	08/28/00	14:17	RJG	S	CONC
52	DJGQ8C	T00828B	METTRA	08/28/00	14:22	RJG	S	CONC
53	DHX40	T00828B	METTRA	08/28/00	14:26	RJG	S	CONC

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	DHX40P5	T00828B	METTRA	08/28/00	14:30	RJG	S	CONC
55	DHX40S	T00828B	METTRA	08/28/00	14:34	RJG	S	CONC
56	DHX40D	T00828B	METTRA	08/28/00	14:38	RJG	S	CONC
57	DHX47	T00828B	METTRA	08/28/00	14:42	RJG	S	CONC
58	DHX4A	T00828B	METTRA	08/28/00	14:47	RJG	S	CONC
59	CCV3-5	T00828B	METTRA	08/28/00	14:51	RJG	S	CONC
60	CCB5	T00828B	METTRA	08/28/00	14:55	RJG	S	CONC
61	DJGQAB	T00828B	METTRA	08/28/00	14:59	RJG	S	CONC
62	DJGQAC	T00828B	METTRA	08/28/00	15:03	RJG	S	CONC
63	DJENL	T00828B	METTRA	08/28/00	15:07	RJG	S	CONC
64	DJENLP5	T00828B	METTRA	08/28/00	15:11	RJG	S	CONC
65	DJENLS	T00828B	METTRA	08/28/00	15:16	RJG	S	CONC
66	DJENLD	T00828B	METTRA	08/28/00	15:20	RJG	S	CONC
67	DJENX	T00828B	METTRA	08/28/00	15:24	RJG	S	CONC
68	DJEP5	T00828B	METTRA	08/28/00	15:28	RJG	S	CONC
69	CCV3-6	T00828B	METTRA	08/28/00	15:32	RJG	S	CONC
70	CCB6	T00828B	METTRA	08/28/00	15:36	RJG	S	CONC

Method: METTRA Standard: STD1
Run Time: 08/28/00 10:40:37

Elem	AG	AL	AS	BA	BE	CA	CD
Avge	-.00041	.05649	-.01233	.00116	-.07354	.00444	-.00033
SDev	.00057	.01273	.00094	.00010	.00116	.00031	.00028
%RSD	141.42	22.540	7.6416	8.8584	1.5720	7.0102	84.202

#1	.00000	.06549	-.01166	.00123	-.07435	.00422	-.00053
#2	-.00081	.04749	-.01300	.00108	-.07272	.00466	-.00014

Elem	CO	CR	CU	FE	MG	MN	MO
Avge	-.00083	.00008	.02299	-.00175	-.00118	.00218	.00159
SDev	.00026	.00087	.00210	.00002	.00024	.00021	.00005
%RSD	30.971	1146.1	9.1138	1.1632	20.278	9.7381	3.4092

#1	-.00101	.00069	.02151	-.00176	-.00101	.00203	.00155
#2	-.00065	-.00054	.02447	-.00173	-.00135	.00233	.00162

Elem	NI	PB/1	PB/2	SB/1	SB/2	SE/1	SE/2
Avge	.00065	.02113	-.00940	-.05561	.01148	-.11047	.07803
SDev	.00016	.00454	.00203	.00582	.01079	.01009	.01073
%RSD	24.554	21.474	21.640	10.471	94.048	9.1334	13.748

#1	.00053	.02434	-.01084	-.05973	.01911	-.10334	.08562
#2	.00076	.01792	-.00796	-.05149	.00384	-.11761	.07044

Elem	TL	V	ZN
Avge	-.04246	.00032	-.00030
SDev	.00193	.00045	.00003
%RSD	4.5381	141.42	11.852

#1	-.04382	.00064	-.00032
#2	-.04110	.00000	-.00027

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18602	--	--	--	--	--	--
SDev	188.3735	--	--	--	--	--	--
%RSD	1.012674	--	--	--	--	--	--
#1	18735	--	--	--	--	--	--
#2	18468	--	--	--	--	--	--

Method: METTRA Standard: STD6
Run Time: 08/28/00 10:44:48

0057.023.10

Elem	AG	AS	CD	PB/1	PB/2	SB/1	SB/2
Avge	10.632	5.2214	12.559	5.3314	6.6709	9.1756	6.4451
SDev	.035	.0043	.050	.0058	.0772	.0713	.0211
%RSD	.32640	.08315	.39472	.10949	1.1575	.77704	.32688
#1	10.656	5.2245	12.594	5.3356	6.7255	9.2260	6.4600
#2	10.607	5.2184	12.524	5.3273	6.6163	9.1252	6.4302

Elem	SE/1	SE/2	TL
Avge	5.0464	5.0419	3.7895
SDev	.0018	.0111	.0138
%RSD	.03578	.22049	.36374
#1	5.0451	5.0498	3.7993
#2	5.0476	5.0340	3.7798

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18257	--	--	--	--	--	--
SDev	55.40154	--	--	--	--	--	--
%RSD	.3034458	--	--	--	--	--	--
#1	18218	--	--	--	--	--	--
#2	18297	--	--	--	--	--	--

Method: METTRA Standard: STD7
Run Time: 08/28/00 10:48:59

0057.024.1

Elem	AL	BA	BE	CA	CO	CR	CU
Avge	7.3579	14.038	10.731	4.3255	2.9494	11.453	3.6433
SDev	.0391	.045	.068	.0345	.0202	.076	.0129
%RSD	.53097	.31942	.63210	.79807	.68636	.66070	.35513

#1	7.3855	14.070	10.779	4.3499	2.9637	11.507	3.6525
#2	7.3302	14.007	10.683	4.3011	2.9351	11.400	3.6342

Elem	FE	MG	MN	MO	NI	V	ZN
Avge	3.9006	13.039	9.7890	2.1160	2.4143	.82044	2.9341
SDev	.0185	.082	.0651	.0020	.0170	.00552	.0178
%RSD	.47389	.62987	.66502	.09373	.70365	.67285	.60730

#1	3.9136	13.097	9.8351	2.1174	2.4263	.82434	2.9467
#2	3.8875	12.981	9.7430	2.1146	2.4023	.81653	2.9215

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18077	--	--	--	--	--	--
SDev	91.46399	--	--	--	--	--	--
%RSD	.5059793	--	--	--	--	--	--

#1	18012	--	--	--	--	--	--
#2	18141	--	--	--	--	--	--

Method: METTRA

Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AG	328.068	STD6	STD1	.188108	.000076	08/28/00 10:48:59
AL	308.215	STD7	STD1	6.86486	-.387795	08/28/00 10:48:59
AS	189.042	STD6	STD1	.191067	.002356	08/28/00 10:48:59
BA	493.409	STD7	STD1	.284959	-.000329	08/28/00 10:48:59
BE	313.042	STD7	STD1	.367287	.027009	08/28/00 10:48:59
CA	317.933	STD7	STD1	23.1423	-.102675	08/28/00 10:48:59
CD	226.502	STD6	STD1	.079620	.000027	08/28/00 10:48:59
CO	228.616	STD7	STD1	1.35582	.001128	08/28/00 10:48:59
CR	267.716	STD7	STD1	.349075	-.000027	08/28/00 10:48:59
CU	324.753	STD7	STD1	1.10487	-.025404	08/28/00 10:48:59
FE	271.441	STD7	STD1	12.9051	.022546	08/28/00 10:48:59
MG	279.078	STD7	STD1	7.66837	.009079	08/28/00 10:48:59
MN	257.610	STD7	STD1	.408711	-.000890	08/28/00 10:48:59
MO	202.030	STD7	STD1	1.89180	-.003001	08/28/00 10:48:59
NI	231.604	STD7	STD1	1.65617	-.001070	08/28/00 10:48:59
PB/1	220.351	STD6	STD1	.188313	-.003979	08/28/00 10:48:59
PB/2	220.352	STD6	STD1	.149693	.001407	08/28/00 10:48:59
PB	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
SB/1	206.831	STD6	STD1	.108328	.006024	08/28/00 10:48:59
SB/2	206.832	STD6	STD1	.155434	-.001784	08/28/00 10:48:59
SB	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
SE/1	196.021	STD6	STD1	.193917	.021422	08/28/00 10:48:59
SE/2	196.022	STD6	STD1	.201456	-.015720	08/28/00 10:48:59
SE	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
TL	190.864	STD6	STD1	.521925	.022161	08/28/00 10:48:59
V	292.402	STD7	STD1	4.85606	-.001555	08/28/00 10:48:59
ZN	213.856	STD7	STD1	1.37171	.000405	08/28/00 10:48:59

669.665

Analysis Report

08/28/00 10:56:45 AM

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Method: METTRA Sample Name: ICV3-1 0057-022-8 Operator: RJG
 Run Time: 08/28/00 10:52:39
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Revised
8/28/00

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50854	11.659	.25644	.99406	1.0090	25.109	.24940
SDev	.00444	.030	.00083	.00751	.0263	.575	.00068
%RSD	.87263	.25325	.32485	.75494	2.6049	2.2884	.27186
#1	.50540	11.638	.25702	.99937	1.0276	25.515	.24892
#2	.51168	11.680	.25585	.98876	.99040	24.702	.24987
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.55000	13.750	.27500	1.1000	1.1000	27.500	.27500
Low	.45000	11.250	.22500	.90000	.90000	22.500	.22500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0045	1.0091	.95684	12.344	24.066	.98388	1.0186
SDev	.0145	.0110	.00216	.054	.289	.00298	.0209
%RSD	1.4426	1.0936	.22559	.44093	1.2020	.30312	2.0540
#1	.99424	1.0013	.95836	12.383	24.271	.98177	1.0038
#2	1.0147	1.0170	.95531	12.306	23.862	.98599	1.0334
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	1.1000	1.1000	13.750	27.500	1.1000	1.1000
Low	.90000	.90000	.90000	11.250	22.500	.90000	.90000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0174	.25542	.25705	.25651	.25993	.25562	.25705
SDev	.0356	.00093	.00181	.00152	.00240	.00448	.00219
%RSD	3.5032	.36346	.70384	.59098	.92383	1.7525	.85132
#1	1.0426	.25608	.25833	.25758	.26163	.25245	.25551
#2	.99220	.25477	.25577	.25544	.25823	.25878	.25860
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	1.1000			.27500			.27500
Low	.90000			.22500			.22500
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.25143	.25970	.25695	.53128	1.0070	1.0541	
SDev	.00561	.00327	.00031	.01271	.0170	.0138	
%RSD	2.2326	1.2587	.12107	2.3923	1.6853	1.3129	
#1	.24746	.26202	.25717	.54026	1.0190	1.0639	
#2	.25540	.25739	.25673	.52229	.99497	1.0444	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.27500	.55000	1.1000	1.1000	
Low			.22500	.45000	.90000	.90000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18441	--	--	--	--	--	--
SDev	276.8323	--	--	--	--	--	--
%RSD	1.501186	--	--	--	--	--	--
#1	18637	--	--	--	--	--	--
#2	18245	--	--	--	--	--	--

Method: METTRA Sample Name: ICB1

Operator: RJG

Run Time: 08/28/00 10:56:49

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00014	-.02568	-.00059	.00028	.00011	.01862	.00009
SDev	.00012	.02682	.00066	.00023	.00045	.00929	.00022
%RSD	86.267	104.45	110.89	80.679	416.50	49.864	241.97
#1	.00006	-.00671	-.00106	.00012	-.00021	.01206	-.00007
#2	.00023	-.04465	-.00013	.00044	.00043	.02519	.00025
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00000	.00043	.00156	.00142	.00553	.00148	.00309
SDev	.00028	.00041	.00102	.00886	.00621	.00026	.00042
%RSD	81994.	93.868	65.204	624.87	112.24	17.578	13.599
#1	-.00020	.00015	.00084	-.00485	.00114	.00129	.00339
#2	.00020	.00072	.00228	.00768	.00992	.00166	.00279
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00128	-.00137	-.00058	-.00085	-.00191	-.00095	-.00127
SDev	.00025	.00004	.00082	.00053	.00122	.00093	.00103
%RSD	19.421	2.6732	139.66	62.781	63.933	97.914	80.915
#1	.00146	-.00135	-.00116	-.00122	-.00105	-.00029	-.00055
#2	.00110	-.00140	-.00001	-.00047	-.00278	-.00162	-.00200
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	-.00163	.00242	.00108	.00114	.00097	.00137	
SDev	.00142	.00166	.00063	.00417	.00282	.00021	
%RSD	87.371	68.272	58.644	364.10	291.60	15.636	
#1	-.00263	.00360	.00152	-.00180	-.00103	.00122	
#2	-.00062	.00125	.00063	.00409	.00296	.00152	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

Analysis Report

08/28/00 11:00:54 AM

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18318	--	--	--	--	--	--
SDev	53.20978	--	--	--	--	--	--
%RSD	.2904793	--	--	--	--	--	--
#1	18356	--	--	--	--	--	--
#2	18280	--	--	--	--	--	--

Method: METTRA Sample Name: ICSA 0057-011-1 Operator: RJG
Run Time: 08/28/00 11:00:58
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00043	506.78	.00072	.00156	-.00126	472.99	.00095
SDev	.00020	2.53	.00076	.00003	.00028	3.19	.00132
%RSD	45.826	.49943	105.78	2.1514	22.354	.67440	138.34
#1	.00029	508.57	.00125	.00153	-.00145	475.24	.00002
#2	.00057	504.99	.00018	.00158	-.00106	470.73	.00188
Errors	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value		500.00				500.00	
Range		20.000				20.000	
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00054	.00270	.00242	203.28	516.78	.00772	-.00468
SDev	.00028	.00024	.00043	1.78	3.30	.00014	.00146
%RSD	50.542	8.8511	17.852	.87320	.63786	1.8639	31.151
#1	.00035	.00254	.00211	204.54	519.11	.00762	-.00571
#2	.00074	.00287	.00272	202.03	514.45	.00783	-.00365
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	QC Pass	NOCHECK	NOCHECK
Value				200.00	500.00		
Range				20.000	20.000		
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00235	-.05836	.02954	.00027	.00719	-.00465	-.00070
SDev	.00215	.00487	.00304	.00041	.00787	.00641	.00165
%RSD	91.397	8.3369	10.299	153.00	109.43	137.97	235.04
#1	.00083	-.06180	.03169	.00056	.01276	-.00918	-.00187
#2	.00387	-.05492	.02739	-.00002	.00163	-.00011	.00047
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	-.01272	-.00079	-.00476	.00409	-.00188	.00499	
SDev	.00997	.00347	.00100	.00313	.00058	.00020	
%RSD	78.345	439.85	21.076	76.492	30.685	3.9576	
#1	-.01977	.00166	-.00547	.00188	-.00147	.00485	
#2	-.00567	-.00324	-.00405	.00630	-.00229	.00513	
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	
Value							
Range							

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17435	--	--	--	--	--	--
SDev	10.53617	--	--	--	--	--	--
%RSD	.0604310	--	--	--	--	--	--
#1	17428	--	--	--	--	--	--
#2	17442	--	--	--	--	--	--

Method: METTRA Sample Name: ICSAB 0014-197-7 Operator: RJG
 Run Time: 08/28/00 11:05:08
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.1072	507.98	1.0116	.51766	.48593	474.95	.92432
SDev	.0000	1.53	.0041	.00350	.00309	2.99	.00004
%RSD	.00213	.30162	.40183	.67712	.63643	.63046	.00472
#1	1.1072	509.06	1.0144	.52014	.48811	477.07	.92435
#2	1.1072	506.89	1.0087	.51518	.48374	472.83	.92429
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	500.00	1.0000	.50000	.50000	500.00	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.48993	.50063	.54127	204.14	517.08	.50356	.98545
SDev	.00035	.00138	.00226	1.50	2.42	.00038	.00845
%RSD	.07054	.27495	.41653	.73494	.46797	.07476	.85785
#1	.48969	.49965	.54287	205.20	518.79	.50383	.97947
#2	.49018	.50160	.53968	203.08	515.37	.50330	.99142
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000	.50000	.50000	200.00	500.00	.50000	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.97790	.99604	1.0354	1.0223	1.0562	1.0454	1.0490
SDev	.00595	.01020	.0176	.0083	.0300	.0094	.0037
%RSD	.60847	1.0244	1.6953	.81292	2.8425	.90322	.35265
#1	.98211	.98882	1.0478	1.0282	1.0774	1.0387	1.0516
#2	.97370	1.0033	1.0230	1.0164	1.0349	1.0521	1.0464
Errors	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK	NOCHECK	QC Pass
Value	1.0000			1.0000			1.0000
Range	20.000			20.000			20.000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.99087	1.0318	1.0182	1.0879	.50161	1.0588	
SDev	.01929	.0208	.0074	.0264	.00130	.0072	
%RSD	1.9471	2.0146	.73074	2.4262	.26013	.68343	
#1	.97723	1.0465	1.0235	1.1066	.50254	1.0639	
#2	1.0045	1.0171	1.0129	1.0693	.50069	1.0537	
Errors	NOCHECK	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	
Value			1.0000	1.0000	.50000	1.0000	
Range			20.000	20.000	20.000	20.000	

Analysis Report

QC Standard

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17405	--	--	--	--	--	--
SDev	16.22893	--	--	--	--	--	--
%RSD	.0932417	--	--	--	--	--	--
#1	17417	--	--	--	--	--	--
#2	17394	--	--	--	--	--	--

Method: METTRA Sample Name: DHMODB

Operator: RJG

Run Time: 08/28/00 11:11:34

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00037	-.02459	.00074	-.00009	.00019	.09577	.00022
SDev	.00001	.04216	.00046	.00003	.00118	.00358	.00015
%RSD	1.3803	171.47	62.412	32.516	627.04	3.7341	69.734
#1	.00037	.00522	.00041	-.00012	-.00065	.09830	.00032
#2	.00037	-.05441	.00106	-.00007	.00102	.09324	.00011
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00050	.00004	.00211	.01159	.01943	-.00051	.00109
SDev	.00008	.00009	.00063	.01167	.00085	.00004	.00013
%RSD	15.291	238.23	29.931	100.73	4.3631	8.3849	11.752
#1	-.00056	-.00003	.00256	.00333	.01883	-.00048	.00119
#2	-.00045	.00010	.00166	.01984	.02003	-.00054	.00100
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00071	.00105	.00088	.00093	-.00043	.00017	-.00003
SDev	.00045	.00224	.00288	.00117	.00015	.00030	.00015
%RSD	63.095	213.29	328.56	125.69	34.273	174.41	467.19
#1	.00040	.00263	-.00116	.00010	-.00054	.00038	.00007
#2	.00103	-.00053	.00291	.00176	-.00033	-.00004	-.00014
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00201	.00310	.00140	-.00070	.00078	.00400	
SDev	.00133	.00267	.00134	.00158	.00216	.00022	
%RSD	66.032	86.266	95.948	227.08	277.28	5.5375	
#1	-.00107	.00121	.00045	.00042	-.00075	.00416	
#2	-.00295	.00499	.00235	-.00181	.00231	.00385	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18489	--	--	--	--	--	--
SDev	580.5706	--	--	--	--	--	--
%RSD	3.140099	--	--	--	--	--	--
#1	18078	--	--	--	--	--	--
#2	18899	--	--	--	--	--	--

Method: METTRA Sample Name: DHM0DC

Operator: RJG

Run Time: 08/28/00 11:15:43

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04971	1.9214	1.9521	1.9104	.04839	48.388	.04710
SDev	.00013	.0210	.0003	.0040	.00009	.035	.00026
%RSD	.26802	1.0938	.01493	.21067	.17470	.07310	.54897

#1	.04962	1.9363	1.9519	1.9132	.04833	48.363	.04692
#2	.04980	1.9066	1.9523	1.9075	.04845	48.413	.04728

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.06000	2.4000	2.4000	2.4000	.06000	60.000	.06000
Low	.04000	1.6000	1.6000	1.6000	.04000	40.000	.04000

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49000	.19654	.23861	.90024	46.824	.48000	1.0049
SDev	.00369	.00098	.00014	.01239	.019	.00248	.0093
%RSD	.75338	.49647	.05778	1.3764	.04142	.51628	.92173

#1	.48739	.19585	.23851	.89148	46.810	.47825	.99836
#2	.49261	.19723	.23870	.90900	46.838	.48175	1.0115

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.60000	.24000	.30000	1.2000	60.000	.60000	1.2000
Low	.40000	.16000	.20000	.80000	40.000	.40000	.80000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.48097	.50822	.49194	.49736	.49037	.49639	.49438
SDev	.00399	.00360	.00093	.00182	.00305	.00544	.00261
%RSD	.82865	.70857	.19012	.36653	.62210	1.0960	.52854

#1	.48379	.50567	.49128	.49607	.49253	.49254	.49253
#2	.47815	.51076	.49260	.49865	.48821	.50023	.49623

Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.60000			.60000			.60000
Low	.40000			.40000			.40000

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9383	1.9450	1.9428	2.0918	.48251	.50956
SDev	.0175	.0023	.0043	.0203	.00210	.00105
%RSD	.90240	.12014	.21959	.96991	.43483	.20682

#1	1.9260	1.9466	1.9397	2.1061	.48399	.51031
#2	1.9507	1.9433	1.9458	2.0774	.48103	.50882

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			2.4000	2.4000	.60000	.60000
Low			1.6000	1.6000	.40000	.40000

Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18400	--	--	--	--	--	--
SDev	76.19076	--	--	--	--	--	--
%RSD	.4140762	--	--	--	--	--	--
#1	18454	--	--	--	--	--	--
#2	18346	--	--	--	--	--	--

Method: METTRA Sample Name: DH1VQ

Operator: RJG

Run Time: 08/28/00 11:19:52

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00061	2.9192	.00145	.09258	.00011	504.11	.00006
SDev	.00023	.0247	.00125	.00130	.00015	6.52	.00012
%RSD	38.466	.84558	86.005	1.4057	137.60	1.2934	183.79

#1	.00077	2.9017	.00057	.09166	.00021	499.50	-.00002
#2	.00044	2.9367	.00233	.09350	.00000	508.72	.00014

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00675	.00429	.00718	4.3731	248.91	2.1950	.00409
SDev	.00021	.00017	.00089	.0804	3.63	.0381	.00004
%RSD	3.1774	3.9086	12.347	1.8377	1.4569	1.7347	1.0639

#1	.00660	.00441	.00655	4.3163	246.34	2.1681	.00412
#2	.00690	.00417	.00781	4.4299	251.47	2.2219	.00406

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03563	.00099	.00080	.00087	.00011	-.00021	-.00011
SDev	.00234	.00250	.00002	.00085	.00173	.00033	.00080
%RSD	6.5807	251.71	2.3725	97.649	1636.4	156.75	750.72

#1	.03397	.00276	.00082	.00146	-.00112	-.00045	-.00067
#2	.03729	-.00077	.00079	.00027	.00133	.00002	.00046

Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00029	.00129	.00096	.00141	.00760	.01601
SDev	.00043	.00034	.00037	.00056	.00071	.00027
%RSD	147.93	26.596	38.995	39.294	9.3071	1.6968

#1	.00060	.00153	.00122	.00102	.00710	.01581
#2	-.00001	.00104	.00069	.00181	.00810	.01620

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			10.000	10.000	50.000	5.0000
Low			-.00500	-.01000	-.05000	-.02000

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18152	--	--	--	--	--	--
SDev	266.1912	--	--	--	--	--	--
%RSD	1.466418	--	--	--	--	--	--
#1	18341	--	--	--	--	--	--
#2	17964	--	--	--	--	--	--

Method: METTRA Sample Name: DH3P6

Operator: RJG

Run Time: 08/28/00 11:24:01

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00099	.68512	.00214	.05189	-.00062	495.83	.00004
SDev	.00034	.02933	.00138	.00022	.00022	3.38	.00000
%RSD	34.031	4.2806	64.658	.43229	36.350	.68161	4.6972
#1	.00123	.70586	.00312	.05205	-.00078	498.22	.00004
#2	.00075	.66438	.00116	.05173	-.00046	493.44	.00004
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01048	.00142	.01128	1.0594	153.74	1.1036	.00439
SDev	.00041	.00029	.00038	.0225	.41	.0017	.00007
%RSD	3.9388	20.679	3.3941	2.1271	.26644	.15087	1.5558
#1	.01077	.00162	.01101	1.0754	154.03	1.1048	.00434
#2	.01019	.00121	.01155	1.0435	153.45	1.1025	.00444
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01057	.00210	-.00086	.00013	-.00071	.00100	.00043
SDev	.00093	.00059	.00108	.00052	.00100	.00099	.00033
%RSD	8.8207	27.895	125.46	415.39	140.88	99.107	76.087
#1	.01123	.00252	-.00162	-.00024	-.00000	.00030	.00020
#2	.00991	.00169	-.00010	.00050	-.00142	.00170	.00066
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00048	.00053	.00019	-.00069	.00305	.00808	
SDev	.00106	.00066	.00079	.00131	.00252	.00006	
%RSD	220.70	124.06	408.21	189.13	82.746	.67550	
#1	-.00123	.00007	-.00037	.00023	.00483	.00812	
#2	.00027	.00100	.00076	-.00161	.00126	.00805	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17792	--	--	--	--	--	--
SDev	16.61701	--	--	--	--	--	--
%RSD	.0933952	--	--	--	--	--	--
#1	17780	--	--	--	--	--	--
#2	17804	--	--	--	--	--	--

Method: METTRA Sample Name: DH3P9

Operator: RJG

Run Time: 08/28/00 11:28:09

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00023	1.3313	.00116	.05827	-.00037	286.13	.00609
SDev	.00022	.0157	.00057	.00008	.00031	1.52	.00004
%RSD	94.362	1.1786	49.203	.13270	84.530	.52972	.61672

#1	.00038	1.3424	.00076	.05832	-.00059	287.20	.00607
#2	.00008	1.3202	.00156	.05821	-.00015	285.05	.00612

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04826	.00200	.00505	2.3299	173.33	1.2020	.03016
SDev	.00015	.00008	.00021	.0405	.41	.0017	.00002
%RSD	.32066	4.0610	4.0881	1.7374	.23479	.13988	.07037

#1	.04837	.00206	.00491	2.3586	173.62	1.2032	.03015
#2	.04815	.00195	.00520	2.3013	173.05	1.2008	.03018

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.12296	.00174	.00134	.00148	-.00175	-.00035	-.00081
SDev	.00011	.00217	.00057	.00110	.00046	.00092	.00076
%RSD	.08537	124.61	42.247	74.555	26.074	265.03	93.867

#1	.12304	.00327	.00175	.00225	-.00142	.00030	-.00027
#2	.12289	.00021	.00094	.00070	-.00207	-.00099	-.00135

Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00247	.00419	.00197	-.00473	.00496	.00822
SDev	.00181	.00158	.00166	.00132	.00005	.00009
%RSD	73.541	37.792	84.156	28.021	.98918	1.0711

#1	-.00375	.00307	.00080	-.00566	.00500	.00816
#2	-.00118	.00531	.00315	-.00379	.00493	.00828

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			10.000	10.000	50.000	5.0000
Low			-.00500	-.01000	-.05000	-.02000

Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17884	--	--	--	--	--	--
SDev	109.5670	--	--	--	--	--	--
%RSD	.6126514	--	--	--	--	--	--
#1	17807	--	--	--	--	--	--
#2	17962	--	--	--	--	--	--

Method: METTRA Sample Name: DH5A9

Operator: RJG

Run Time: 08/28/00 11:32:18

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00414	340.62	.20727	1.8028	.02121	470.71	.00679
SDev	.00030	.55	.00152	.0066	.00024	2.63	.00296
%RSD	7.1409	.16121	.73489	.36818	1.1439	.55886	43.552
#1	.00393	341.01	.20835	1.8075	.02104	472.57	.00470
#2	.00435	340.23	.20619	1.7981	.02138	468.85	.00888
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.31864	.54362	.93314	H717.22	271.73	H13.190	.01925
SDev	.00020	.00039	.00367	3.50	1.23	.025	.00098
%RSD	.06377	.07227	.39339	.48737	.45371	.18710	5.1122
#1	.31878	.54334	.93573	H719.70	272.60	H13.207	.01856
#2	.31849	.54390	.93054	H714.75	270.85	H13.172	.01995
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC High	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.72206	.30989	.35247	.33829	.00693	-.00124	.00148
SDev	.00317	.00339	.00712	.00362	.00777	.00462	.00049
%RSD	.43852	1.0937	2.0203	1.0704	112.13	373.39	33.158
#1	.72430	.30749	.35751	.34085	.01242	-.00450	.00114
#2	.71982	.31228	.34744	.33573	.00144	.00203	.00183
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	-.01204	-.00852	L-.00969	.00491	.59286	1.7363	
SDev	.00743	.00025	.00264	.00591	.00074	.0126	
%RSD	61.671	2.9636	27.248	120.46	.12555	.72373	
#1	-.01729	-.00870	L-.01156	.00073	.59339	1.7452	
#2	-.00679	-.00834	L-.00783	.00909	.59234	1.7274	
Errors	NOCHECK	NOCHECK	LC Low	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	21761	--	--	--	--	--	--
SDev	119.6074	--	--	--	--	--	--
%RSD	.5496442	--	--	--	--	--	--
#1	21676	--	--	--	--	--	--
#2	21845	--	--	--	--	--	--

Method: METTRA Sample Name: DH5AC

Operator: RJG

Run Time: 08/28/00 11:37:18

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00011	19.753	.01021	.19595	.00077	139.38	-.00062
SDev	.00009	.104	.00145	.00350	.00037	4.31	.00045
%RSD	81.717	.52802	14.222	1.7877	47.657	3.0899	73.716

#1	.00017	19.826	.01124	.19843	.00051	142.42	-.00094
#2	.00005	19.679	.00918	.19347	.00103	136.33	-.00030

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01395	.03106	.04047	30.391	40.152	.98114	.00907
SDev	.00019	.00005	.00088	.285	.871	.00845	.00061
%RSD	1.3358	.15855	2.1687	.93929	2.1683	.86158	6.7445

#1	.01408	.03110	.03985	30.593	40.767	.98711	.00864
#2	.01382	.03103	.04109	30.189	39.536	.97516	.00950

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04775	.00970	.01326	.01207	.00069	.00086	.00081
SDev	.00171	.00449	.00074	.00199	.00072	.00192	.00152
%RSD	3.5809	46.269	5.5810	16.463	104.37	222.87	188.94

#1	.04896	.01287	.01378	.01348	.00018	-.00050	-.00027
#2	.04654	.00652	.01274	.01067	.00121	.00222	.00188

Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00372	.00389	.00136	-.00217	.04070	.11836
SDev	.00133	.00070	.00091	.00056	.00136	.00250
%RSD	35.680	17.981	66.986	25.937	3.3440	2.1088

#1	-.00466	.00339	.00071	-.00257	.04166	.12012
#2	-.00278	.00438	.00200	-.00177	.03974	.11659

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			10.000	10.000	50.000	5.0000
Low			-.00500	-.01000	-.05000	-.02000

Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18185	--	--	--	--	--	--
SDev	34.75457	--	--	--	--	--	--
%RSD	.1911175	--	--	--	--	--	--
#1	18210	--	--	--	--	--	--
#2	18160	--	--	--	--	--	--

Method: METTRA Sample Name: DHARW

Operator: RJG

Run Time: 08/28/00 11:41:27

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00016	6.5640	.00477	.09128	-.00033	233.32	-.00004
SDev	.00017	.0374	.00025	.00072	.00033	1.89	.00014
%RSD	110.37	.56913	5.1850	.79316	98.962	.81194	328.84
#1	.00028	6.5904	.00460	.09179	-.00056	234.66	-.00014
#2	.00003	6.5376	.00495	.09077	-.00010	231.98	.00006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00412	.01188	.01619	9.8554	109.75	.46593	.04600
SDev	.00080	.00024	.00003	.0531	.75	.00205	.00016
%RSD	19.387	1.9958	.16669	.53869	.67913	.44036	.34913
#1	.00469	.01204	.01621	9.8929	110.28	.46738	.04589
#2	.00356	.01171	.01617	9.8178	109.22	.46447	.04611
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01643	.00451	.00401	.00417	.00031	-.00013	.00002
SDev	.00042	.00281	.00158	.00012	.00324	.00178	.00011
%RSD	2.5704	62.411	39.381	2.7859	1046.0	1418.4	554.96
#1	.01613	.00649	.00289	.00409	-.00198	.00113	.00010
#2	.01672	.00252	.00512	.00426	.00260	-.00138	-.00006
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00115	.00302	.00163	-.00066	.01362	.05389	
SDev	.00055	.00300	.00219	.00027	.00125	.00040	
%RSD	47.726	99.318	133.86	40.335	9.1446	.74558	
#1	-.00154	.00090	.00009	-.00085	.01450	.05418	
#2	-.00076	.00515	.00318	-.00047	.01274	.05361	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17798	--	--	--	--	--	--
SDev	105.4653	--	--	--	--	--	--
%RSD	.5925688	--	--	--	--	--	--
#1	17723	--	--	--	--	--	--
#2	17873	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-1 0057-040-1 Operator: RJG
 Run Time: 08/28/00 11:45:36
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0429	24.110	.52376	1.9865	2.0841	51.712	.50694
SDev	.0064	.198	.00185	.0218	.0190	.442	.00363
%RSD	.61399	.82307	.35343	1.0982	.91150	.85469	.71583
#1	1.0474	24.250	.52507	2.0019	2.0976	52.025	.50951
#2	1.0384	23.970	.52245	1.9710	2.0707	51.400	.50438
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0687	2.0690	1.9435	25.620	49.771	2.0352	2.0846
SDev	.0123	.0102	.0193	.189	.437	.0133	.0005
%RSD	.59404	.49279	.99242	.73887	.87846	.65158	.02344
#1	2.0774	2.0762	1.9571	25.754	50.080	2.0446	2.0843
#2	2.0600	2.0618	1.9298	25.486	49.462	2.0259	2.0849
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0374	.52654	.52060	.52257	.51837	.51521	.51626
SDev	.0193	.00049	.00341	.00244	.00450	.00186	.00026
%RSD	.94742	.09231	.65555	.46657	.86814	.36124	.04981
#1	2.0510	.52688	.52301	.52430	.52155	.51389	.51644
#2	2.0237	.52619	.51818	.52085	.51518	.51653	.51608
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.52016	.52434	.52295	1.0649	2.0362	2.1003	
SDev	.00005	.00068	.00044	.0121	.0173	.0172	
%RSD	.00976	.12916	.08314	1.1331	.84729	.81875	
#1	.52019	.52386	.52264	1.0734	2.0484	2.1125	
#2	.52012	.52482	.52325	1.0563	2.0240	2.0882	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.55000	1.1000	2.2000	2.2000	
Low			.45000	.90000	1.8000	1.8000	

Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17989	--	--	--	--	--	--
SDev	22.06256	--	--	--	--	--	--
%RSD	.1226468	--	--	--	--	--	--
#1	17973	--	--	--	--	--	--
#2	18004	--	--	--	--	--	--

Method: METTRA Sample Name: CCB1

Operator: RJG

Run Time: 08/28/00 11:49:45

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00017	-.00327	.00076	.00032	-.00027	.03172	.00025
SDev	.00010	.00214	.00045	.00006	.00061	.00345	.00002
%RSD	59.482	65.633	59.403	19.298	230.15	10.880	8.9652
#1	.00010	-.00175	.00108	.00028	.00017	.02928	.00026
#2	.00024	-.00478	.00044	.00037	-.00070	.03416	.00023
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00027	.00022	.00177	.00607	.01598	.00091	.00434
SDev	.00006	.00012	.00094	.00711	.00104	.00005	.00147
%RSD	21.927	54.520	52.972	117.09	6.5407	5.0876	33.897
#1	.00023	.00030	.00111	.01110	.01672	.00087	.00538
#2	.00031	.00013	.00244	.00105	.01524	.00094	.00330
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00042	-.00120	-.00039	-.00066	.00000	-.00210	-.00140
SDev	.00023	.00112	.00205	.00099	.00177	.00024	.00075
%RSD	53.605	93.392	520.76	149.53	174520.	11.433	53.650
#1	.00058	-.00200	.00105	.00004	.00126	-.00193	-.00087
#2	.00026	-.00041	-.00184	-.00136	-.00125	-.00227	-.00193
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00027	.00170	.00122	.00178	-.00060	.00063	
SDev	.00106	.00157	.00069	.00350	.00017	.00005	
%RSD	399.89	92.450	56.805	196.63	28.708	7.3771	
#1	.00102	.00059	.00073	.00425	-.00048	.00067	
#2	-.00048	.00281	.00171	-.00069	-.00072	.00060	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17743	--	--	--	--	--	--
SDev	455.5536	--	--	--	--	--	--
%RSD	2.567566	--	--	--	--	--	--
#1	18065	--	--	--	--	--	--
#2	17420	--	--	--	--	--	--

Method: METTRA Sample Name: DHA V1

Operator: RJG

Run Time: 08/28/00 11:53:54

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00002	5.8464	.00269	.07764	-.00016	240.14	.00005
SDev	.00037	.0529	.00111	.00068	.00027	1.85	.00013
%RSD	1535.3	.90534	41.274	.88157	172.08	.77183	257.05
#1	.00029	5.8838	.00190	.07813	-.00035	241.45	-.00004
#2	-.00024	5.8089	.00347	.07716	.00003	238.82	.00014
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00350	.01120	.01596	8.8624	99.899	.43216	.03813
SDev	.00013	.00002	.00013	.0406	.664	.00204	.00017
%RSD	3.6230	.17707	.83486	.45764	.66464	.47109	.44866
#1	.00341	.01118	.01586	8.8911	100.37	.43360	.03801
#2	.00359	.01121	.01605	8.8338	99.430	.43072	.03825
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01350	.00582	.00448	.00492	-.00084	.00114	.00048
SDev	.00009	.00192	.00127	.00021	.00141	.00293	.00149
%RSD	.63481	33.026	28.363	4.2200	166.88	257.33	310.50
#1	.01344	.00717	.00358	.00478	-.00184	.00321	.00153
#2	.01356	.00446	.00538	.00507	.00015	-.00093	-.00057
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00272	.00219	.00056	-.00383	.01365	.05302	
SDev	.00002	.00268	.00179	.00211	.00255	.00082	
%RSD	.85741	122.23	322.37	55.086	18.704	1.5389	
#1	-.00270	.00408	.00182	-.00234	.01546	.05360	
#2	-.00273	.00030	-.00071	-.00533	.01185	.05245	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17844	--	--	--	--	--	--
SDev	55.86144	--	--	--	--	--	--
%RSD	.3130483	--	--	--	--	--	--
#1	17805	--	--	--	--	--	--
#2	17884	--	--	--	--	--	--

Method: METTRA Sample Name: DHHRV

Operator: RJG

Run Time: 08/28/00 11:58:03

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00027	.25050	.00293	.01846	-.00034	14.726	.00005
SDev	.00024	.00973	.00144	.00001	.00006	.029	.00003
%RSD	90.612	3.8852	48.939	.04038	17.098	.19823	54.748
#1	.00010	.25738	.00192	.01845	-.00030	14.706	.00007
#2	.00044	.24362	.00395	.01846	-.00038	14.747	.00003
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00049	.00110	.00762	5.6816	5.3193	.08384	-.00005
SDev	.00022	.00012	.00085	.0284	.0194	.00048	.00061
%RSD	44.590	10.550	11.211	.50014	.36437	.57176	1168.7
#1	.00064	.00102	.00702	5.6615	5.3056	.08350	-.00048
#2	.00033	.00118	.00822	5.7017	5.3330	.08418	.00038
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00344	.00330	.00245	.00273	-.00120	.00054	-.00004
SDev	.00011	.00250	.00107	.00154	.00039	.00029	.00033
%RSD	3.0700	75.912	43.553	56.552	32.587	54.258	819.60
#1	.00352	.00506	.00321	.00382	-.00093	.00075	.00019
#2	.00337	.00153	.00170	.00164	-.00148	.00033	-.00027
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	-.00053	.00353	.00218	-.00285	.00111	.01430	
SDev	.00208	.00068	.00115	.00132	.00059	.00005	
%RSD	392.89	19.356	52.683	46.365	53.069	.34903	
#1	-.00200	.00305	.00137	-.00378	.00069	.01426	
#2	.00094	.00401	.00299	-.00191	.00152	.01433	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17976	--	--	--	--	--	--
SDev	98.28784	--	--	--	--	--	--
%RSD	.5467680	--	--	--	--	--	--
#1	18046	--	--	--	--	--	--
#2	17907	--	--	--	--	--	--

Method: METTRA Sample Name: DHHT1

Operator: RJG

Run Time: 08/28/00 12:02:12

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00002	.00594	.00149	.02354	-.00044	57.612	-.00003
SDev	.00016	.00572	.00057	.00008	.00023	.468	.00003
%RSD	876.50	96.222	38.584	.34223	52.395	.81246	89.446

#1	-.00009	.00999	.00108	.02360	-.00060	57.943	-.00001
#2	.00013	.00190	.00189	.02348	-.00027	57.281	-.00005

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00028	-.00005	.00317	.60944	9.5986	.16087	-.00014
SDev	.00017	.00017	.00015	.01511	.0781	.00122	.00047
%RSD	62.632	353.17	4.7480	2.4795	.81348	.75745	332.51

#1	-.00040	-.00016	.00328	.62013	9.6538	.16174	.00019
#2	-.00015	.00007	.00307	.59876	9.5434	.16001	-.00048

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00097	.00016	.00060	.00045	.00208	.00042	.00097
SDev	.00028	.00245	.00101	.00014	.00262	.00120	.00167
%RSD	28.779	1513.0	167.70	31.743	126.36	285.49	172.23

#1	.00117	-.00157	.00131	.00035	.00393	.00127	.00215
#2	.00077	.00189	-.00011	.00056	.00022	-.00043	-.00021

Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00252	.00213	.00058	-.00140	-.00026	.02276
SDev	.00088	.00268	.00150	.00197	.00001	.00002
%RSD	34.980	125.79	256.40	140.47	5.5952	.09224

#1	-.00190	.00024	-.00047	-.00280	-.00025	.02278
#2	-.00315	.00403	.00164	-.00001	-.00027	.02275

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			10.000	10.000	50.000	5.0000
Low			-.00500	-.01000	-.05000	-.02000

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17881	--	--	--	--	--	--
SDev	148.9882	--	--	--	--	--	--
%RSD	.8332162	--	--	--	--	--	--
#1	17776	--	--	--	--	--	--
#2	17986	--	--	--	--	--	--

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Analysis Report

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Method: METTRA Sample Name: DHHT1P5

Operator: RJG

Run Time: 08/28/00 12:06:22

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00022	-.02347	.00027	.00447	.00005	11.389	.00013
SDev	.00002	.00641	.00009	.00014	.00001	.053	.00001
%RSD	10.057	27.301	33.315	3.0650	9.7628	.46397	8.7419
#1	.00020	-.02800	.00033	.00437	.00006	11.426	.00012
#2	.00023	-.01894	.00020	.00456	.00005	11.351	.00014
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00015	-.00028	.00152	.11828	1.8496	.03176	-.00067
SDev	.00008	.00016	.00008	.00737	.0085	.00014	.00022
%RSD	49.981	59.020	5.2910	6.2353	.46050	.44302	32.482
#1	-.00010	-.00039	.00158	.11307	1.8556	.03186	-.00082
#2	-.00021	-.00016	.00146	.12350	1.8436	.03166	-.00051
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00097	-.00127	.00041	-.00015	-.00271	.00049	-.00058
SDev	.00006	.00109	.00092	.00025	.00092	.00057	.00069
%RSD	6.2996	85.598	224.17	167.39	34.033	116.86	119.16
#1	.00093	-.00050	-.00024	-.00033	-.00336	.00008	-.00106
#2	.00102	-.00204	.00106	.00003	-.00206	.00089	-.00009
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00177	.00095	.00122	.00320	-.00072	.00439	
SDev	.00070	.00106	.00094	.00274	.00000	.00007	
%RSD	39.779	111.56	76.911	85.680	.20401	1.6615	
#1	.00127	.00020	.00056	.00126	-.00072	.00434	
#2	.00227	.00169	.00189	.00513	-.00071	.00444	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18241	--	--	--	--	--	--
SDev	25.49037	--	--	--	--	--	--
%RSD	.1397454	--	--	--	--	--	--
#1	18223	--	--	--	--	--	--
#2	18259	--	--	--	--	--	--

Analysis Report

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Method: METTRA Sample Name: DHHT1S

Operator: RJG

Run Time: 08/28/00 12:10:31

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05106	2.0325	2.0127	1.9563	.04978	108.86	.04829
SDev	.00039	.0222	.0184	.0205	.00025	.91	.00027
%RSD	.75741	1.0909	.91244	1.0477	.49908	.84043	.55443
#1	.05134	2.0482	2.0257	1.9708	.04996	109.51	.04848
#2	.05079	2.0169	1.9997	1.9418	.04961	108.22	.04810
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50179	.20160	.24554	1.5476	59.616	.65771	1.0290
SDev	.00354	.00086	.00265	.0148	.517	.00447	.0007
%RSD	.70634	.42644	1.0776	.95793	.86721	.67912	.06527
#1	.50430	.20220	.24741	1.5581	59.982	.66087	1.0294
#2	.49929	.20099	.24367	1.5371	59.250	.65455	1.0285
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.49098	.52020	.50487	.50997	.51117	.50823	.50921
SDev	.00498	.00257	.00580	.00472	.00795	.00032	.00243
%RSD	1.0139	.49469	1.1481	.92615	1.5542	.06292	.47764
#1	.49450	.52202	.50897	.51331	.51678	.50801	.51093
#2	.48746	.51838	.50077	.50663	.50555	.50846	.50749
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.9918	2.0210	2.0113	2.1346	.49435	.52535	
SDev	.0074	.0217	.0169	.0184	.00592	.00329	
%RSD	.37256	1.0723	.84155	.86106	1.1966	.62667	
#1	1.9970	2.0364	2.0233	2.1476	.49854	.52768	
#2	1.9866	2.0057	1.9993	2.1216	.49017	.52302	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17856	--	--	--	--	--	--
SDev	25.87983	--	--	--	--	--	--
%RSD	.1449347	--	--	--	--	--	--
#1	17838	--	--	--	--	--	--
#2	17874	--	--	--	--	--	--

Analysis Report

Method: METTRA Sample Name: DHHT1D

Operator: RJG

Run Time: 08/28/00 12:14:40

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05073	2.0300	1.9982	1.9458	.04952	108.27	.04775
SDev	.00009	.0101	.0025	.0069	.00006	.36	.00046
%RSD	.18126	.49966	.12520	.35438	.11611	.32897	.95561
#1	.05066	2.0372	2.0000	1.9507	.04956	108.52	.04743
#2	.05079	2.0229	1.9964	1.9410	.04948	108.02	.04808
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49922	.20027	.24492	1.5525	59.357	.65362	1.0199
SDev	.00090	.00069	.00027	.0071	.209	.00129	.0006
%RSD	.17978	.34494	.10988	.45704	.35171	.19674	.06340
#1	.49986	.20075	.24511	1.5575	59.504	.65453	1.0194
#2	.49859	.19978	.24473	1.5474	59.209	.65271	1.0203
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.48892	.51505	.50206	.50638	.50371	.50176	.50241
SDev	.00117	.00096	.00434	.00257	.00736	.00337	.00470
%RSD	.23850	.18563	.86357	.50821	1.4603	.67114	.93461
#1	.48809	.51437	.50512	.50820	.50891	.50414	.50573
#2	.48974	.51573	.49899	.50457	.49851	.49938	.49909
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	1.9792	2.0000	1.9931	2.1235	.49232	.52661	
SDev	.0053	.0141	.0111	.0165	.00189	.00213	
%RSD	.26540	.70370	.55877	.77645	.38500	.40483	
#1	1.9829	2.0099	2.0009	2.1352	.49366	.52812	
#2	1.9755	1.9900	1.9852	2.1119	.49098	.52510	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17935	--	--	--	--	--	--
SDev	40.97628	--	--	--	--	--	--
%RSD	.2284758	--	--	--	--	--	--
#1	17906	--	--	--	--	--	--
#2	17964	--	--	--	--	--	--

Analysis Report

08/28/00 12:22:55 PM

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Method: METTRA Sample Name: DHHT4

Operator: RJG

Run Time: 08/28/00 12:18:49

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00035	.02608	.00174	.02469	-.00067	56.933	.00026
SDev	.00013	.00894	.00107	.00016	.00006	.464	.00009
%RSD	36.957	34.297	61.663	.64410	8.3819	.81522	32.939
#1	.00044	.03240	.00250	.02480	-.00071	57.262	.00020
#2	.00026	.01975	.00098	.02458	-.00063	56.605	.00033
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00019	.00039	.00247	.63857	9.4881	.38369	.00263
SDev	.00008	.00028	.00048	.01170	.0549	.00176	.00047
%RSD	41.186	72.163	19.508	1.8328	.57864	.45924	17.805
#1	-.00013	.00058	.00213	.64685	9.5270	.38494	.00297
#2	-.00024	.00019	.00281	.63029	9.4493	.38245	.00230
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00265	.00133	-.00114	-.00032	-.00181	.00096	.00004
SDev	.00001	.00060	.00009	.00026	.00150	.00089	.00010
%RSD	.44935	44.810	8.2919	81.496	82.550	92.816	262.22
#1	.00266	.00175	-.00108	-.00014	-.00075	.00033	-.00003
#2	.00264	.00091	-.00121	-.00051	-.00287	.00159	.00010
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	-.00077	.00312	.00183	.00139	-.00024	.00384	
SDev	.00055	.00286	.00210	.00031	.00039	.00015	
%RSD	71.684	91.676	114.64	22.537	163.79	3.8027	
#1	-.00038	.00515	.00331	.00117	.00004	.00394	
#2	-.00116	.00110	.00035	.00161	-.00052	.00373	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17797	--	--	--	--	--	--
SDev	56.74532	--	--	--	--	--	--
%RSD	.3188418	--	--	--	--	--	--
#1	17757	--	--	--	--	--	--
#2	17837	--	--	--	--	--	--

Analysis Report

08/28/00 12:27:03 PM

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Method: METTRA Sample Name: DHHT5

Operator: RJG

Run Time: 08/28/00 12:22:58

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00022	.02483	.00104	.02375	-.00035	55.066	-.00002
SDev	.00018	.01237	.00036	.00027	.00015	.405	.00011
%RSD	82.334	49.799	34.526	1.1208	41.956	.73501	457.25
#1	-.00034	.03358	.00129	.02394	-.00045	55.352	.00005
#2	-.00009	.01609	.00079	.02356	-.00025	54.780	-.00010
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00061	-.00047	.00109	.62711	9.1821	.37077	-.00048
SDev	.00049	.00028	.00005	.00311	.0641	.00189	.00001
%RSD	80.063	58.243	4.2941	.49591	.69860	.51063	1.6640
#1	-.00095	-.00067	.00106	.62491	9.2275	.37211	-.00047
#2	-.00026	-.00028	.00112	.62931	9.1368	.36943	-.00048
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00141	.00012	-.00010	-.00003	-.00046	-.00119	-.00094
SDev	.00077	.00119	.00023	.00055	.00134	.00128	.00041
%RSD	54.714	996.16	219.46	1873.6	292.51	107.71	43.171
#1	.00087	.00096	.00006	.00036	.00049	-.00209	-.00123
#2	.00196	-.00072	-.00026	-.00042	-.00140	-.00028	-.00066
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00022	.00166	.00103	.00180	-.00107	.00360	
SDev	.00009	.00158	.00102	.00361	.00038	.00007	
%RSD	41.308	95.320	99.186	200.47	35.790	1.8976	
#1	-.00016	.00054	.00031	.00436	-.00134	.00364	
#2	-.00029	.00277	.00175	-.00075	-.00080	.00355	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17995	--	--	--	--	--	--
SDev	56.67489	--	--	--	--	--	--
%RSD	.3149510	--	--	--	--	--	--
#1	17955	--	--	--	--	--	--
#2	18035	--	--	--	--	--	--

Analysis Report

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Method: METTRA Sample Name: DHHT7

Operator: RJG

Run Time: 08/28/00 12:27:07

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00003	.01795	.00118	.02740	-.00037	57.956	.00001
SDev	.00022	.01086	.00052	.00007	.00013	.154	.00014
%RSD	775.32	60.513	44.226	.26513	35.981	.26542	2122.7
#1	-.00019	.02563	.00155	.02745	-.00046	58.065	.00010
#2	.00013	.01027	.00081	.02735	-.00027	57.848	-.00009
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00019	-.00016	.00317	.92297	9.5172	.68193	.00016
SDev	.00022	.00008	.00010	.00914	.0033	.00007	.00090
%RSD	112.03	50.723	3.2312	.99037	.03440	.01014	557.43
#1	-.00035	-.00010	.00324	.91651	9.5196	.68189	.00080
#2	-.00004	-.00022	.00310	.92943	9.5149	.68198	-.00048
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00124	-.00024	-.00042	-.00036	-.00200	-.00014	-.00076
SDev	.00001	.00144	.00073	.00097	.00014	.00065	.00039
%RSD	.51480	608.35	174.91	270.31	7.0483	475.24	51.031
#1	.00124	-.00126	-.00094	-.00104	-.00210	.00032	-.00048
#2	.00123	.00078	.00010	.00033	-.00190	-.00060	-.00103
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00252	.00207	.00054	.00037	-.00015	.00680	
SDev	.00093	.00259	.00142	.00326	.00038	.00001	
%RSD	36.817	124.85	260.20	870.48	254.29	.11031	
#1	-.00186	.00024	-.00046	.00268	.00012	.00679	
#2	-.00317	.00390	.00155	-.00193	-.00042	.00680	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17952	--	--	--	--	--	--
SDev	50.66448	--	--	--	--	--	--
%RSD	.2822223	--	--	--	--	--	--
#1	17916	--	--	--	--	--	--
#2	17988	--	--	--	--	--	--

Analysis Report

08/28/00 12:35:21 PM

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page 1

Method: METTRA Sample Name: DH5A9/2 Fe,Mn Operator: RJG
 Run Time: 08/28/00 12:31:16
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00249	194.52	.11596	1.0192	.01192	282.91	.00457
SDev	.00043	1.32	.00330	.0087	.00018	2.72	.00102
%RSD	17.081	.68059	2.8470	.85837	1.5427	.96084	22.289
#1	.00219	195.46	.11829	1.0254	.01179	284.83	.00385
#2	.00279	193.58	.11362	1.0130	.01205	280.99	.00529
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.18305	.31365	.50761	409.02	155.56	7.3515	.01217
SDev	.00075	.00197	.00400	3.29	1.34	.0530	.00068
%RSD	.41171	.62800	.78804	.80486	.86027	.72116	5.6123
#1	.18358	.31504	.51044	411.35	156.51	7.3890	.01169
#2	.18252	.31226	.50478	406.69	154.62	7.3140	.01266
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.41310	.17885	.20191	.19423	.00305	-.00258	-.00070
SDev	.00456	.00016	.00416	.00282	.00346	.00108	.00043
%RSD	1.1027	.08829	2.0583	1.4542	113.27	41.737	61.998
#1	.41632	.17896	.20484	.19622	.00550	-.00334	-.00039
#2	.40988	.17874	.19897	.19223	.00061	-.00182	-.00101
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.41310	.17885	.20191	.19423	.00305	-.00258	-.00070
SDev	.00456	.00016	.00416	.00282	.00346	.00108	.00043
%RSD	1.1027	.08829	2.0583	1.4542	113.27	41.737	61.998
#1	.41632	.17896	.20484	.19622	.00550	-.00334	-.00039
#2	.40988	.17874	.19897	.19223	.00061	-.00182	-.00101
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.41310	.17885	.20191	.19423	.00305	-.00258	-.00070
SDev	.00456	.00016	.00416	.00282	.00346	.00108	.00043
%RSD	1.1027	.08829	2.0583	1.4542	113.27	41.737	61.998
#1	.41632	.17896	.20484	.19622	.00550	-.00334	-.00039
#2	.40988	.17874	.19897	.19223	.00061	-.00182	-.00101
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.41310	.17885	.20191	.19423	.00305	-.00258	-.00070
SDev	.00456	.00016	.00416	.00282	.00346	.00108	.00043
%RSD	1.1027	.08829	2.0583	1.4542	113.27	41.737	61.998
#1	.41632	.17896	.20484	.19622	.00550	-.00334	-.00039
#2	.40988	.17874	.19897	.19223	.00061	-.00182	-.00101
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00774	.00028	-.00239	.00260	.34569	.99339
SDev	.00237	.00127	.00164	.00225	.00502	.00829
%RSD	30.631	452.07	68.473	86.517	1.4532	.83409
#1	-.00942	-.00062	-.00355	.00101	.34925	.99925
#2	-.00607	.00118	-.00123	.00419	.34214	.98753
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			10.000	10.000	50.000	5.0000
Low			-.00500	-.01000	-.05000	-.02000

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00774	.00028	-.00239	.00260	.34569	.99339
SDev	.00237	.00127	.00164	.00225	.00502	.00829
%RSD	30.631	452.07	68.473	86.517	1.4532	.83409
#1	-.00942	-.00062	-.00355	.00101	.34925	.99925
#2	-.00607	.00118	-.00123	.00419	.34214	.98753
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			10.000	10.000	50.000	5.0000
Low			-.00500	-.01000	-.05000	-.02000

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	19882	--	--	--	--	--	--
SDev	74.45889	--	--	--	--	--	--
%RSD	.3744994	--	--	--	--	--	--
#1	19830	--	--	--	--	--	--
#2	19935	--	--	--	--	--	--

Analysis Report

08/28/00 12:39:30 PM

669 714 ✓
page 1

Method: METTRA Sample Name: CCV3-2

Operator: RJG

Run Time: 08/28/00 12:35:25

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0332	23.812	.51584	1.9566	2.0786	51.533	.50193
SDev	.0005	.024	.00139	.0072	.0102	.194	.00132
%RSD	.04584	.09885	.26935	.36964	.49266	.37580	.26216
#1	1.0336	23.829	.51682	1.9617	2.0858	51.670	.50286
#2	1.0329	23.796	.51486	1.9515	2.0713	51.396	.50100
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0485	2.0492	1.9227	25.437	49.725	2.0208	2.0676
SDev	.0049	.0023	.0064	.048	.158	.0029	.0113
%RSD	.23697	.11120	.33205	.18729	.31787	.14502	.54807
#1	2.0519	2.0508	1.9272	25.471	49.837	2.0228	2.0595
#2	2.0450	2.0476	1.9182	25.403	49.613	2.0187	2.0756
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0131	.52137	.51443	.51674	.51936	.50965	.51288
SDev	.0106	.00346	.00521	.00232	.00282	.00336	.00130
%RSD	.52590	.66284	1.0124	.44956	.54344	.65889	.25346
#1	2.0206	.51893	.51812	.51839	.52136	.50727	.51196
#2	2.0056	.52382	.51075	.51510	.51737	.51202	.51380
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000
Elem	SE/1	SE/2	SE	TL	V__	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.51560	.52035	.51877	1.0533	2.0245	2.0706	
SDev	.00080	.00350	.00207	.0088	.0090	.0070	
%RSD	.15570	.67241	.39833	.83475	.44407	.33753	
#1	.51504	.52282	.52023	1.0471	2.0308	2.0755	
#2	.51617	.51787	.51731	1.0596	2.0181	2.0656	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.55000	1.1000	2.2000	2.2000	
Low			.45000	.90000	1.8000	1.8000	

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Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18083	--	--	--	--	--	--
SDev	60.84571	--	--	--	--	--	--
%RSD	.3364788	--	--	--	--	--	--
#1	18126	--	--	--	--	--	--
#2	18040	--	--	--	--	--	--

Analysis Report

08/28/00 12:43:39 PM

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page 1

Method: METTRA Sample Name: CCB2

Operator: RJG

Run Time: 08/28/00 12:39:33

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00046	.00902	.00027	.00026	.00010	.02151	.00035
SDev	.00015	.00473	.00046	.00011	.00003	.00218	.00002
%RSD	32.127	52.479	169.04	41.697	27.925	10.135	4.4113
#1	.00057	.00567	-.00005	.00033	.00012	.02305	.00036
#2	.00036	.01236	.00059	.00018	.00008	.01997	.00034
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00023	.00050	.00099	.01827	.01438	.00087	.00407
SDev	.00010	.00047	.00010	.01109	.00212	.00007	.00187
%RSD	45.331	93.879	10.162	60.714	14.707	7.9233	46.015
#1	.00030	.00083	.00106	.02611	.01588	.00092	.00539
#2	.00015	.00017	.00091	.01042	.01289	.00082	.00274
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00053	.00089	-.00030	.00009	-.00170	.00022	-.00042
SDev	.00033	.00173	.00059	.00097	.00101	.00055	.00070
%RSD	61.538	193.54	194.28	1024.5	59.325	250.99	167.86
#1	.00077	-.00033	-.00072	-.00059	-.00098	.00061	.00008
#2	.00030	.00212	.00011	.00078	-.00241	-.00017	-.00091
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00112	-.00068	-.00008	.00236	-.00048	.00055	
SDev	.00112	.00047	.00006	.00075	.00075	.00011	
%RSD	99.841	69.702	73.022	31.882	158.34	18.973	
#1	.00033	-.00034	-.00012	.00183	-.00101	.00063	
#2	.00192	-.00101	-.00004	.00289	.00006	.00048	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18077	--	--	--	--	--	--
SDev	53.81055	--	--	--	--	--	--
%RSD	.2976815	--	--	--	--	--	--
#1	18038	--	--	--	--	--	--
#2	18115	--	--	--	--	--	--

Analysis Report

08/28/00 12:47:47 PM

page 1

Method: METTRA Sample Name: DJA2FB

Operator: RJG

Run Time: 08/28/00 12:43:42

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00015	.02436	.00005	-.00004	-.00047	.11483	-.00005
SDev	.00009	.00617	.00049	.00004	.00020	.00141	.00001
%RSD	59.531	25.316	977.72	80.880	42.679	1.2294	16.480
#1	.00021	.02872	.00040	-.00002	-.00062	.11583	-.00006
#2	.00009	.02000	-.00030	-.00007	-.00033	.11383	-.00005
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00059	-.00063	.00008	.00827	.00098	-.00034	.00026
SDev	.00009	.00041	.00006	.00397	.00055	.00000	.00047
%RSD	15.504	65.071	71.018	48.013	56.292	1.0268	178.32
#1	-.00065	-.00034	.00012	.01108	.00137	-.00034	.00059
#2	-.00052	-.00092	.00004	.00546	.00059	-.00035	-.00007
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00017	.00076	.00091	.00086	-.00025	.00001	-.00008
SDev	.00020	.00108	.00053	.00001	.00152	.00071	.00098
%RSD	116.95	141.08	58.420	.55856	617.56	12589.	1257.7
#1	.00032	.00153	.00053	.00086	-.00132	-.00050	-.00077
#2	.00003	.00000	.00129	.00086	.00083	.00051	.00062
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	-.00142	.00132	.00041	.00050	-.00142	.00548	
SDev	.00207	.00136	.00022	.00037	.00058	.00014	
%RSD	146.22	103.33	53.703	74.819	40.634	2.5443	
#1	.00005	.00035	.00025	.00076	-.00101	.00558	
#2	-.00288	.00228	.00056	.00023	-.00182	.00538	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

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Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17982	--	--	--	--	--	--
SDev	116.7085	--	--	--	--	--	--
%RSD	.6490288	--	--	--	--	--	--
#1	17900	--	--	--	--	--	--
#2	18065	--	--	--	--	--	--

Method: METTRA Sample Name: DJA2FC Operator: RJG
 Run Time: 08/28/00 12:47:51
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05410	2.1324	2.1199	2.0130	.05235	53.624	.05129
SDev	.00029	.0100	.0076	.0018	.00005	.192	.00011
%RSD	.54365	.46966	.35687	.08902	.09228	.35829	.20966
#1	.05431	2.1394	2.1252	2.0143	.05239	53.760	.05121
#2	.05389	2.1253	2.1145	2.0118	.05232	53.488	.05136
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.06000	2.4000	2.4000	2.4000	.06000	60.000	.06000
Low	.04000	1.6000	1.6000	1.6000	.04000	40.000	.04000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.52811	.21069	.24919	.98828	51.800	.51745	L-.00039
SDev	.00002	.00046	.00046	.00726	.119	.00058	.00030
%RSD	.00318	.21604	.18503	.73467	.22981	.11152	75.565
#1	.52812	.21101	.24887	.98315	51.884	.51785	L-.00018
#2	.52810	.21037	.24952	.99341	51.716	.51704	L-.00060
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low
High	.60000	.24000	.30000	1.2000	60.000	.60000	1.2000
Low	.40000	.16000	.20000	.80000	40.000	.40000	.80000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51795	.54532	.53349	.53743	-.00039	.00031	L.00008
SDev	.00351	.00297	.00601	.00500	.00165	.00196	.00076
%RSD	.67692	.54478	1.1267	.93008	427.82	626.20	942.91
#1	.52043	.54742	.53774	.54096	-.00155	.00170	L.00062
#2	.51547	.54322	.52924	.53389	.00078	-.00107	L-.00046
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Low
High	.60000			.60000			.60000
Low	.40000			.40000			.40000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	2.1047	2.1319	2.1229	2.2322	.51822	.55180	
SDev	.0068	.0228	.0129	.0014	.00355	.00164	
%RSD	.32499	1.0678	.60798	.06436	.68581	.29709	
#1	2.0999	2.1480	2.1320	2.2332	.52073	.55295	
#2	2.1096	2.1158	2.1138	2.2311	.51571	.55064	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			2.4000	2.4000	.60000	.60000	
Low			1.6000	1.6000	.40000	.40000	

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Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18127	--	--	--	--	--	--
SDev	5.126524	--	--	--	--	--	--
%RSD	.0282806	--	--	--	--	--	--
#1	18124	--	--	--	--	--	--
#2	18131	--	--	--	--	--	--

Analysis Report

08/28/00 12:56:05 PM

page 1

Method: METTRA Sample Name: DJ3EE

Operator: RJG

Run Time: 08/28/00 12:52:00

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00000	.05032	.00049	.77343	-.00016	5.6151	-.00001
SDev	.00010	.01710	.00114	.00663	.00023	.0854	.00010
%RSD	2214.2	33.983	230.37	.85692	146.52	1.5205	1043.6

#1	.00008	.06241	-.00031	.77812	-.00033	5.6755	-.00008
#2	-.00007	.03823	.00130	.76874	.00001	5.5548	.00006

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00054	.00249	.00550	2.8440	1.2945	.03358	.00001
SDev	.00051	.00033	.00003	.0494	.0171	.00036	.00047
%RSD	94.117	13.369	.57452	1.7369	1.3187	1.0770	4116.7

#1	-.00018	.00273	.00552	2.8789	1.3065	.03383	.00034
#2	-.00091	.00226	.00547	2.8091	1.2824	.03332	-.00032

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00329	-.00018	.00009	.00000	-.02688	-.00121	-.00976
SDev	.00017	.00222	.00150	.00026	.00117	.00069	.00007
%RSD	5.0599	1264.0	1685.2	29306.	4.3424	57.006	.75074

#1	.00341	-.00175	.00115	.00019	-.02605	-.00170	-.00981
#2	.00317	.00139	-.00097	-.00018	-.02770	-.00073	-.00971

Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00246	.00127	.00167	.00594	-.00056	.00594
SDev	.00140	.00119	.00126	.00468	.00002	.00015
%RSD	56.872	93.646	75.590	78.753	3.0679	2.5349

#1	.00345	.00212	.00256	.00925	-.00055	.00604
#2	.00147	.00043	.00078	.00263	-.00057	.00583

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			10.000	10.000	50.000	5.0000
Low			-.00500	-.01000	-.05000	-.02000

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18227	--	--	--	--	--	--
SDev	157.6848	--	--	--	--	--	--
%RSD	.8651357	--	--	--	--	--	--
#1	18115	--	--	--	--	--	--
#2	18338	--	--	--	--	--	--

Analysis Report

08/28/00 01:00:14 PM

page 1

Method: METTRA Sample Name: DJ3EEP5 Operator: RJG
 Run Time: 08/28/00 12:56:09
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00013	.01729	.00150	.15714	.00000	1.1257	-.00001
SDev	.00080	.00308	.00111	.00310	.00053	.0257	.00002
%RSD	634.91	17.823	74.008	1.9708	47699.	2.2807	112.83

#1	-.00069	.01511	.00071	.15495	.00038	1.1076	-.00002
#2	.00044	.01947	.00228	.15933	-.00037	1.1439	-.00000

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00007	.00052	.00040	.55555	.26033	.00659	-.00032
SDev	.00032	.00027	.00055	.00300	.01120	.00022	.00034
%RSD	467.89	51.376	135.72	.54000	4.3003	3.3177	106.13

#1	-.00029	.00033	.00002	.55342	.25241	.00644	-.00056
#2	.00016	.00070	.00079	.55767	.26825	.00675	-.00008

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00133	.00029	-.00104	-.00060	-.00528	.00037	-.00151
SDev	.00126	.00537	.00109	.00106	.00002	.00144	.00096
%RSD	94.434	1880.7	104.33	177.11	.40827	386.14	63.911

#1	.00044	-.00351	-.00027	-.00135	-.00529	-.00064	-.00219
#2	.00222	.00408	-.00181	.00015	-.00526	.00139	-.00083

Elem	SE/1	SE/2	SE	TL	V	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00123	-.00154	-.00061	.00081	-.00096	.00163
SDev	.00205	.00079	.00016	.00271	.00057	.00003
%RSD	166.49	51.419	25.461	333.20	59.293	2.1171

#1	-.00022	-.00098	-.00073	-.00110	-.00136	.00166
#2	.00269	-.00210	-.00050	.00273	-.00056	.00161

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18381	--	--	--	--	--	--
SDev	344.2188	--	--	--	--	--	--
%RSD	1.872667	--	--	--	--	--	--
#1	18625	--	--	--	--	--	--
#2	18138	--	--	--	--	--	--

Analysis Report

08/28/00 01:04:24 PM

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page 1

Method: METTRA Sample Name: DJ3EES

Operator: RJG

Run Time: 08/28/00 13:00:18

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05562	2.4389	2.1065	2.7638	.05089	59.867	.04929
SDev	.00009	.0050	.0118	.0142	.00021	.308	.00001
%RSD	.15893	.20383	.55833	.51331	.40918	.51513	.02692

#1	.05569	2.4424	2.1149	2.7738	.05104	60.085	.04928
#2	.05556	2.4354	2.0982	2.7537	.05075	59.649	.04930

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.52378	.21229	.26627	3.9121	54.326	.55376	.00064
SDev	.00245	.00046	.00086	.0084	.249	.00251	.00096
%RSD	.46722	.21753	.32493	.21421	.45867	.45394	149.49

#1	.52551	.21262	.26689	3.9180	54.503	.55554	-.00004
#2	.52205	.21196	.26566	3.9062	54.150	.55199	.00132

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.51894	.56545	.53596	.54578	-.02998	-.00049	-.01031
SDev	.00247	.00072	.00473	.00292	.00007	.00039	.00029
%RSD	.47532	.12698	.88321	.53470	.23012	80.150	2.7755

#1	.52068	.56494	.53931	.54784	-.03003	-.00077	-.01051
#2	.51719	.56596	.53261	.54371	-.02993	-.00021	-.01011

Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0848	2.1348	2.1181	2.3615	.51905	.55713
SDev	.0066	.0127	.0107	.0071	.00201	.00247
%RSD	.31626	.59650	.50465	.29900	.38702	.44410

#1	2.0894	2.1438	2.1257	2.3665	.52047	.55888
#2	2.0801	2.1258	2.1105	2.3565	.51763	.55538

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			10.000	10.000	50.000	5.0000
Low			-.00500	-.01000	-.05000	-.02000

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Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17919	--	--	--	--	--	--
SDev	69.22603	--	--	--	--	--	--
%RSD	.3863254	--	--	--	--	--	--
#1	17870	--	--	--	--	--	--
#2	17968	--	--	--	--	--	--

Analysis Report

08/28/00 01:08:33 PM

669 728

page 1

Method: METTRA Sample Name: DJ3EED

Operator: RJG

Run Time: 08/28/00 13:04:28

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05607	2.4637	2.1193	2.7662	.05145	58.947	.04987
SDev	.00014	.0332	.0302	.0293	.00067	.911	.00057
%RSD	.25082	1.3487	1.4264	1.0605	1.2988	1.5458	1.1356
#1	.05617	2.4872	2.1406	2.7869	.05192	59.591	.05027
#2	.05598	2.4402	2.0979	2.7454	.05097	58.303	.04947
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.52828	.21355	.26883	3.8693	53.499	.55707	.00043
SDev	.00741	.00246	.00288	.0791	.707	.00766	.00006
%RSD	1.4035	1.1536	1.0703	2.0447	1.3212	1.3760	13.822
#1	.53352	.21529	.27086	3.9253	53.999	.56249	.00039
#2	.52304	.21181	.26679	3.8134	52.999	.55165	.00047
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.52737	.56490	.54091	.54890	-.02710	-.00027	-.00920
SDev	.00820	.00207	.00900	.00531	.00231	.00433	.00212
%RSD	1.5542	.36636	1.6632	.96764	8.5079	1620.8	23.014
#1	.53316	.56344	.54728	.55266	-.02547	-.00333	-.01070
#2	.52157	.56636	.53455	.54515	-.02873	.00279	-.00770
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	2.0863	2.1421	2.1235	2.3817	.52551	.56008	
SDev	.0096	.0255	.0202	.0351	.00731	.00772	
%RSD	.46182	1.1917	.95289	1.4722	1.3908	1.3777	
#1	2.0931	2.1602	2.1378	2.4065	.53068	.56553	
#2	2.0794	2.1241	2.1092	2.3569	.52034	.55462	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17911	--	--	--	--	--	--
SDev	78.24164	--	--	--	--	--	--
%RSD	.4368314	--	--	--	--	--	--
#1	17856	--	--	--	--	--	--
#2	17966	--	--	--	--	--	--

Analysis Report

08/28/00 01:12:42 PM

669 730
page 1

Method: METTRA Sample Name: DJ3EK

Operator: RJG

Run Time: 08/28/00 13:08:37

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00018	.09424	.00033	.47134	-.00016	3.9530	-.00012
SDev	.00033	.03028	.00123	.00436	.00028	.0246	.00015
%RSD	187.39	32.128	372.94	.92466	177.81	.62318	126.82

#1	-.00006	.11565	-.00054	.47442	-.00036	3.9704	-.00022
#2	.00041	.07283	.00120	.46825	.00004	3.9355	-.00001

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00065	.00050	.00684	.63615	.51030	.01442	-.00078
SDev	.00001	.00020	.00019	.00073	.00364	.00000	.00006
%RSD	1.6585	40.078	2.7613	.11548	.71284	.01270	7.6854

#1	-.00066	.00036	.00670	.63667	.51288	.01442	-.00082
#2	-.00064	.00064	.00697	.63563	.50773	.01442	-.00073

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00156	.00324	-.00064	.00065	-.01606	.00061	-.00494
SDev	.00050	.00098	.00043	.00061	.00098	.00079	.00020
%RSD	31.922	30.120	68.200	93.971	6.1283	129.09	4.0460

#1	.00120	.00255	-.00095	.00022	-.01676	.00117	-.00480
#2	.00191	.00394	-.00033	.00109	-.01536	.00005	-.00508

Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00010	.00103	.00065	.00642	-.00067	.00244
SDev	.00144	.00068	.00093	.00374	.00018	.00004
%RSD	1469.3	65.933	142.55	58.250	27.407	1.7088

#1	.00092	.00151	.00131	.00907	-.00080	.00247
#2	-.00111	.00055	-.00001	.00378	-.00054	.00241

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			10.000	10.000	50.000	5.0000
Low			-.00500	-.01000	-.05000	-.02000

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18283	--	--	--	--	--	--
SDev	111.0517	--	--	--	--	--	--
%RSD	.6074032	--	--	--	--	--	--
#1	18204	--	--	--	--	--	--
#2	18362	--	--	--	--	--	--

Analysis Report

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Method: METTRA Sample Name: DJ3EM

Operator: RJG

Run Time: 08/28/00 13:12:46

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00008	.05913	.00115	1.0874	-.00051	5.4888	-.00007
SDev	.00024	.00727	.00016	.0278	.00046	.1406	.00000
%RSD	310.03	12.297	13.573	2.5554	90.417	2.5623	3.8776

#1	.00025	.06427	.00126	1.0677	-.00019	5.3894	-.00007
#2	-.00009	.05399	.00104	1.1070	-.00084	5.5882	-.00007

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00083	.00180	.00330	8.0769	1.4579	.09158	.00053
SDev	.00026	.00032	.00102	.2105	.0377	.00254	.00031
%RSD	31.231	17.695	30.893	2.6059	2.5887	2.7744	58.691

#1	-.00065	.00158	.00258	7.9281	1.4313	.08978	.00031
#2	-.00102	.00203	.00402	8.2258	1.4846	.09338	.00074

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00206	-.00223	-.00038	-.00100	-.03289	-.00161	-.01203
SDev	.00032	.00223	.00028	.00055	.00057	.00123	.00101
%RSD	15.331	99.957	74.048	55.332	1.7342	76.336	8.3945

#1	.00228	-.00065	-.00058	-.00061	-.03249	-.00074	-.01131
#2	.00183	-.00380	-.00018	-.00139	-.03330	-.00248	-.01274

Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00120	-.00042	.00012	.00560	-.00265	.00642
SDev	.00080	.00145	.00070	.00348	.00021	.00025
%RSD	66.758	347.94	577.42	62.086	7.9960	3.9404

#1	.00177	-.00144	-.00037	.00314	-.00250	.00624
#2	.00063	.00061	.00062	.00806	-.00280	.00660

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			10.000	10.000	50.000	5.0000
Low			-.00500	-.01000	-.05000	-.02000

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17993	--	--	--	--	--	--
SDev	435.0115	--	--	--	--	--	--
%RSD	2.417684	--	--	--	--	--	--
#1	18300	--	--	--	--	--	--
#2	17685	--	--	--	--	--	--

Analysis Report

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Method: METTRA Sample Name: DJ3EN

Operator: RJG

Run Time: 08/28/00 13:16:55

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00022	.06827	.00048	.96799	-.00010	7.8119	-.00020
SDev	.00014	.00582	.00006	.00583	.00017	.0626	.00014
%RSD	64.473	8.5235	12.537	.60219	173.10	.80160	69.805

#1	.00031	.07238	.00044	.97212	-.00022	7.8562	-.00010
#2	.00012	.06416	.00052	.96387	.00002	7.7676	-.00029

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00105	.00082	.00113	4.3392	2.0945	.04789	-.00072
SDev	.00009	.00044	.00003	.0214	.0117	.00033	.00060
%RSD	8.6192	53.606	2.7332	.49377	.55963	.69428	83.212

#1	-.00111	.00113	.00115	4.3543	2.1028	.04813	-.00030
#2	-.00098	.00051	.00110	4.3240	2.0862	.04766	-.00114

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00160	.00229	-.00292	-.00118	-.03345	-.00006	-.01118
SDev	.00082	.00026	.00155	.00095	.00300	.00155	.00203
%RSD	51.132	11.530	53.230	80.050	8.9802	2424.6	18.177

#1	.00102	.00247	-.00401	-.00185	-.03558	-.00116	-.01262
#2	.00218	.00210	-.00182	-.00051	-.03133	.00103	-.00974

Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00506	-.00069	.00122	.00068	-.00004	.00319
SDev	.00144	.00041	.00076	.00088	.00001	.00007
%RSD	28.431	59.693	61.830	128.62	18.636	2.2457

#1	.00404	-.00099	.00069	.00006	-.00003	.00324
#2	.00607	-.00040	.00175	.00131	-.00005	.00314

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			10.000	10.000	50.000	5.0000
Low			-.00500	-.01000	-.05000	-.02000

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18252	--	--	--	--	--	--
SDev	94.78683	--	--	--	--	--	--
%RSD	.5193237	--	--	--	--	--	--
#1	18185	--	--	--	--	--	--
#2	18319	--	--	--	--	--	--

Analysis Report

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Method: METTRA Sample Name: DJ3EQ

Operator: RJG

Run Time: 08/28/00 13:21:04

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00008	.11633	.00111	1.4447	-.00023	4.6767	-.00007
SDev	.00026	.00893	.00135	.0104	.00024	.0363	.00009
%RSD	346.85	7.6781	121.15	.71789	103.89	.77696	127.13

#1	-.00011	.12265	.00016	1.4520	-.00040	4.7024	-.00001
#2	.00026	.11002	.00207	1.4374	-.00006	4.6511	-.00013

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00062	.00512	.04837	9.3719	1.4619	.10200	.00047
SDev	.00022	.00018	.00051	.0638	.0088	.00078	.00039
%RSD	35.964	3.5735	1.0609	.68119	.60161	.76543	83.256

#1	-.00077	.00525	.04874	9.4170	1.4681	.10255	.00074
#2	-.00046	.00499	.04801	9.3268	1.4557	.10144	.00019

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01102	.00525	.00196	.00305	-.02271	.00058	-.00717
SDev	.00165	.00165	.00101	.00123	.00016	.00191	.00122
%RSD	14.967	31.492	51.772	40.159	.68615	327.26	17.001

#1	.00985	.00408	.00124	.00219	-.02282	.00193	-.00631
#2	.01218	.00642	.00267	.00392	-.02260	-.00077	-.00804

Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00160	-.00186	-.00070	.00437	.00065	.00452
SDev	.00128	.00143	.00138	.00470	.00002	.00003
%RSD	79.843	77.331	196.55	107.65	2.3234	.78176

#1	.00070	-.00287	-.00168	.00104	.00067	.00455
#2	.00251	-.00084	.00027	.00769	.00064	.00450

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			10.000	10.000	50.000	5.0000
Low			-.00500	-.01000	-.05000	-.02000

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18282	--	--	--	--	--	--
SDev	121.8696	--	--	--	--	--	--
%RSD	.6666215	--	--	--	--	--	--
#1	18196	--	--	--	--	--	--
#2	18368	--	--	--	--	--	--

Analysis Report

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Method: METTRA Sample Name: CCV3-3

Operator: RJG

Run Time: 08/28/00 13:25:13

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0401	24.028	.52303	1.9733	2.1161	52.415	.50683
SDev	.0011	.065	.00279	.0078	.0008	.070	.00179
%RSD	.10586	.26849	.53312	.39544	.03772	.13318	.35285
#1	1.0409	24.074	.52106	1.9788	2.1155	52.366	.50556
#2	1.0394	23.982	.52500	1.9678	2.1166	52.465	.50809
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0598	2.0638	1.9418	25.661	50.636	2.0465	2.0780
SDev	.0028	.0019	.0075	.009	.026	.0015	.0119
%RSD	.13574	.09178	.38650	.03347	.05108	.07315	.57285
#1	2.0579	2.0624	1.9472	25.667	50.654	2.0454	2.0696
#2	2.0618	2.0651	1.9365	25.655	50.618	2.0476	2.0865
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0419	.52601	.51789	.52059	.52370	.51444	.51753
SDev	.0017	.00674	.00747	.00274	.00892	.00114	.00221
%RSD	.08477	1.2805	1.4433	.52683	1.7030	.22110	.42727
#1	2.0432	.52125	.52317	.52253	.53001	.51364	.51909
#2	2.0407	.53077	.51260	.51865	.51739	.51525	.51596
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.51494	.52597	.52230	1.0659	2.0525	2.0934	
SDev	.00416	.00802	.00396	.0065	.0000	.0000	
%RSD	.80706	1.5242	.75882	.60695	.00096	.00054	
#1	.51200	.53164	.52510	1.0704	2.0525	2.0934	
#2	.51788	.52030	.51950	1.0613	2.0525	2.0934	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.55000	1.1000	2.2000	2.2000	
Low			.45000	.90000	1.8000	1.8000	

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Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18072	--	--	--	--	--	--
SDev	66.96246	--	--	--	--	--	--
%RSD	.3705213	--	--	--	--	--	--
#1	18025	--	--	--	--	--	--
#2	18120	--	--	--	--	--	--

Method: METTRA Sample Name: CCB3

Operator: RJG

Run Time: 08/28/00 13:29:23

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00021	.04778	-.00076	.00071	.00059	.01428	.00060
SDev	.00004	.01026	.00071	.00061	.00057	.01357	.00057
%RSD	20.679	21.482	94.148	85.901	97.734	95.006	95.576
#1	.00024	.05504	-.00025	.00028	.00018	.00469	.00019
#2	.00018	.04052	-.00126	.00114	.00099	.02388	.00101
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00041	.00039	-.00022	.00173	.01327	.00064	.00423
SDev	.00050	.00066	.00108	.01140	.01008	.00046	.00087
%RSD	122.27	171.68	497.31	658.87	75.915	71.922	20.482
#1	.00005	-.00008	-.00098	-.00633	.00615	.00031	.00485
#2	.00076	.00085	.00055	.00979	.02040	.00096	.00362
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00024	.00117	.00070	.00086	-.00047	-.00079	-.00068
SDev	.00019	.00218	.00010	.00080	.00029	.00121	.00090
%RSD	78.318	186.96	14.589	92.733	62.670	153.02	132.36
#1	.00038	.00271	.00078	.00142	-.00026	.00006	-.00004
#2	.00011	-.00038	.00063	.00030	-.00068	-.00164	-.00132
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00113	-.00024	.00021	.00681	-.00089	.00108	
SDev	.00217	.00066	.00116	.00060	.00018	.00042	
%RSD	191.76	271.01	546.02	8.8903	20.495	39.332	
#1	-.00040	-.00071	-.00061	.00638	-.00076	.00078	
#2	.00266	.00022	.00104	.00724	-.00102	.00138	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18304	--	--	--	--	--	--
SDev	25.03186	--	--	--	--	--	--
%RSD	.1367543	--	--	--	--	--	--
#1	18322	--	--	--	--	--	--
#2	18287	--	--	--	--	--	--

Analysis Report

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Method: METTRA Sample Name: DJ3ET

Operator: RJG

Run Time: 08/28/00 13:33:32

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00024	.08309	.00108	1.6122	-.00011	12.415	.00040
SDev	.00032	.01318	.00038	.0054	.00001	.076	.00006
%RSD	133.15	15.859	35.562	.33539	13.230	.61266	14.939
#1	.00001	.09241	.00081	1.6161	-.00010	12.469	.00036
#2	.00047	.07377	.00135	1.6084	-.00012	12.362	.00044
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00070	.00452	.01031	7.0501	2.5842	.08583	.00111
SDev	.00001	.00014	.00052	.0245	.0113	.00029	.00036
%RSD	.77820	3.0132	5.0135	.34720	.43574	.33835	31.994
#1	-.00070	.00442	.00995	7.0674	2.5922	.08603	.00086
#2	-.00070	.00461	.01068	7.0328	2.5763	.08562	.00136
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00750	.00638	.00343	.00442	-.02737	.00035	-.00888
SDev	.00178	.00077	.00038	.00051	.00062	.00128	.00065
%RSD	23.736	12.148	11.134	11.622	2.2663	365.29	7.2818
#1	.00624	.00583	.00316	.00405	-.02693	-.00055	-.00934
#2	.00876	.00693	.00370	.00478	-.02781	.00125	-.00842
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00044	-.00005	.00012	.00473	.00050	.00389	
SDev	.00072	.00008	.00019	.00017	.00056	.00013	
%RSD	162.98	171.65	160.72	3.6520	110.94	3.2185	
#1	.00094	-.00010	.00025	.00460	.00011	.00398	
#2	-.00007	.00001	-.00002	.00485	.00090	.00380	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18165	--	--	--	--	--	--
SDev	54.16410	--	--	--	--	--	--
%RSD	.2981817	--	--	--	--	--	--
#1	18126	--	--	--	--	--	--
#2	18203	--	--	--	--	--	--

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Method: METTRA Sample Name: DJ3EV

Operator: RJG

Run Time: 08/28/00 13:37:41

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00023	.30469	.00242	1.0019	-.00021	3.2645	-.00012
SDev	.00067	.00920	.00092	.0037	.00036	.0463	.00002
%RSD	289.27	3.0179	37.878	.37416	168.78	1.4188	19.102

#1	.00070	.31119	.00307	1.0046	-.00047	3.2972	-.00011
#2	-.00024	.29819	.00177	.99927	.00004	3.2317	-.00014

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00098	.03017	.12420	20.280	1.4827	.20529	.00220
SDev	.00016	.00113	.00127	.174	.0220	.00226	.00008
%RSD	15.951	3.7376	1.0189	.85932	1.4814	1.0990	3.4943

#1	.00109	.03097	.12510	20.403	1.4983	.20688	.00215
#2	.00087	.02937	.12331	20.157	1.4672	.20369	.00226

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06128	.00821	.00567	.00651	-.01212	.00048	-.00372
SDev	.00032	.00304	.00030	.00121	.00224	.00084	.00019
%RSD	.53108	36.959	5.2440	18.559	18.476	174.42	5.0452

#1	.06151	.01036	.00588	.00737	-.01371	.00107	-.00385
#2	.06105	.00607	.00546	.00566	-.01054	-.00011	-.00358

Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00162	-.00001	-.00055	.00331	.00728	.01375
SDev	.00222	.00133	.00162	.00396	.00254	.00017
%RSD	136.44	17818.	297.47	119.69	34.908	1.2240

#1	-.00006	.00093	.00060	.00611	.00908	.01387
#2	-.00319	-.00095	-.00169	.00051	.00548	.01363

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			10.000	10.000	50.000	5.0000
Low			-.00500	-.01000	-.05000	-.02000

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18170	--	--	--	--	--	--
SDev	245.0829	--	--	--	--	--	--
%RSD	1.348811	--	--	--	--	--	--
#1	17997	--	--	--	--	--	--
#2	18344	--	--	--	--	--	--

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Method: METTRA Sample Name: DJ3F5

Operator: RJG

Run Time: 08/28/00 13:41:50

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00003	.08434	.00015	.62501	-.00023	5.2075	.00000
SDev	.00029	.00083	.00055	.01105	.00049	.1048	.00001
%RSD	1068.5	.98107	366.70	1.7680	212.90	2.0130	1117.0

#1	-.00018	.08493	-.00024	.61720	.00012	5.1334	.00001
#2	.00023	.08376	.00054	.63283	-.00057	5.2817	-.00001

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00112	-.00018	-.00082	1.0973	1.1158	.02117	.00027
SDev	.00004	.00027	.00029	.0251	.0222	.00045	.00013
%RSD	3.6503	151.02	34.878	2.2903	1.9929	2.1321	47.627

#1	-.00115	-.00037	-.00102	1.0795	1.1001	.02085	.00018
#2	-.00109	.00001	-.00062	1.1151	1.1315	.02149	.00036

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00035	.00104	-.00097	-.00030	-.02066	.00016	-.00677
SDev	.00112	.00122	.00127	.00044	.00127	.00006	.00039
%RSD	321.33	118.25	130.87	145.21	6.1550	35.208	5.6988

#1	-.00044	.00017	-.00007	.00001	-.01976	.00012	-.00650
#2	.00114	.00190	-.00187	-.00062	-.02155	.00020	-.00704

Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00378	.00139	-.00034	.00081	-.00117	.00361
SDev	.00194	.00007	.00069	.00010	.00001	.00006
%RSD	51.406	4.9796	207.01	11.920	.74869	1.6164

#1	-.00241	.00144	.00016	.00088	-.00118	.00365
#2	-.00516	.00134	-.00083	.00074	-.00117	.00357

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			10.000	10.000	50.000	5.0000
Low			-.00500	-.01000	-.05000	-.02000

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18226	--	--	--	--	--	--
SDev	307.4147	--	--	--	--	--	--
%RSD	1.686652	--	--	--	--	--	--
#1	18444	--	--	--	--	--	--
#2	18009	--	--	--	--	--	--

Analysis Report

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Method: METTRA Sample Name: DJ3F7

Operator: RJG

Run Time: 08/28/00 13:46:00

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00001	.14306	.00188	1.1497	-.00004	8.7262	-.00005
SDev	.00013	.00593	.00025	.0040	.00006	.0497	.00008
%RSD	2230.3	4.1448	13.424	.34731	173.85	.56970	175.11
#1	-.00010	.14725	.00170	1.1526	-.00008	8.7614	.00001
#2	.00009	.13887	.00206	1.1469	.00001	8.6910	-.00010
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00104	.01827	.00154	3.7570	2.1210	.04851	-.00073
SDev	.00035	.00019	.00014	.0002	.0120	.00006	.00014
%RSD	33.363	1.0690	9.3187	.00538	.56544	.13456	19.166
#1	-.00128	.01813	.00143	3.7568	2.1295	.04856	-.00083
#2	-.00079	.01841	.00164	3.7571	2.1125	.04847	-.00063
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00114	.00391	.00296	.00328	-.03218	-.00037	-.01097
SDev	.00045	.00254	.00000	.00085	.00032	.00071	.00058
%RSD	39.588	64.989	.14875	25.890	.98255	189.55	5.2740
#1	.00146	.00570	.00297	.00388	-.03241	-.00088	-.01138
#2	.00082	.00211	.00296	.00268	-.03196	.00013	-.01056
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00019	-.00197	-.00125	.00369	-.00223	.00464	
SDev	.00321	.00052	.00072	.00058	.00244	.00006	
%RSD	1722.6	26.370	57.720	15.716	109.27	1.3603	
#1	.00245	-.00233	-.00074	.00410	-.00396	.00468	
#2	-.00208	-.00160	-.00176	.00328	-.00051	.00459	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18333	--	--	--	--	--	--
SDev	47.62337	--	--	--	--	--	--
%RSD	.2597710	--	--	--	--	--	--
#1	18299	--	--	--	--	--	--
#2	18366	--	--	--	--	--	--

Analysis Report

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Method: METTRA Sample Name: DJ3F9

Operator: RJG

Run Time: 08/28/00 13:50:09

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00019	.07701	.00116	.56288	-.00009	1.8564	-.00000
SDev	.00004	.01099	.00052	.00321	.00022	.0139	.00016
%RSD	23.213	14.274	44.394	.57033	231.82	.74735	5620.3

#1	.00022	.08478	.00080	.56515	-.00025	1.8662	.00011
#2	.00016	.06924	.00152	.56061	.00006	1.8466	-.00011

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00086	.00031	-.00103	.28761	.88489	.01634	.00013
SDev	.00043	.00031	.00015	.00466	.00382	.00011	.00009
%RSD	49.353	101.37	14.399	1.6216	.43140	.65180	64.171

#1	-.00116	.00052	-.00114	.29091	.88759	.01642	.00020
#2	-.00056	.00009	-.00093	.28431	.88219	.01627	.00007

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00105	.00259	-.00167	-.00025	-.00855	-.00036	-.00309
SDev	.00058	.00267	.00190	.00038	.00190	.00138	.00029
%RSD	55.622	103.12	113.59	149.37	22.239	388.80	9.3996

#1	.00146	.00448	-.00301	-.00052	-.00990	.00062	-.00288
#2	.00063	.00070	-.00033	.00001	-.00721	-.00133	-.00329

Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00174	-.00147	-.00040	.00119	-.00145	.00366
SDev	.00152	.00073	.00099	.00260	.00000	.00002
%RSD	86.929	49.498	247.18	218.90	.11194	.41783

#1	.00282	-.00096	.00030	.00302	-.00145	.00365
#2	.00067	-.00199	-.00110	-.00065	-.00146	.00367

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			10.000	10.000	50.000	5.0000
Low			-.00500	-.01000	-.05000	-.02000

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18405	--	--	--	--	--	--
SDev	80.22071	--	--	--	--	--	--
%RSD	.4358714	--	--	--	--	--	--
#1	18348	--	--	--	--	--	--
#2	18461	--	--	--	--	--	--

Analysis Report

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Method: METTRA Sample Name: DJ3FA

Operator: RJG

Run Time: 08/28/00 13:54:18

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00019	.09982	.00001	.53270	-.00001	3.6283	-.00014
SDev	.00008	.00112	.00077	.00038	.00018	.0091	.00004
%RSD	40.448	1.1269	9753.9	.07120	3329.9	.25067	31.018
#1	-.00014	.10062	.00055	.53297	-.00013	3.6347	-.00011
#2	-.00025	.09903	-.00054	.53243	.00012	3.6219	-.00017
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00110	.00069	-.00102	.90300	.57372	.01319	-.00110
SDev	.00007	.00008	.00013	.01289	.00427	.00000	.00008
%RSD	6.4186	11.249	12.741	1.4274	.74424	.00503	7.1884
#1	-.00105	.00064	-.00111	.91211	.57674	.01319	-.00104
#2	-.00115	.00075	-.00092	.89389	.57070	.01319	-.00116
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00122	.00054	.00004	.00020	-.01636	-.00017	-.00556
SDev	.00033	.00104	.00192	.00093	.00096	.00193	.00160
%RSD	26.630	193.47	5309.8	457.50	5.8443	1150.1	28.842
#1	.00145	-.00020	.00139	.00086	-.01704	-.00153	-.00669
#2	.00099	.00127	-.00132	-.00045	-.01569	.00120	-.00443
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00033	-.00124	-.00072	.00516	-.00124	.00367	
SDev	.00187	.00325	.00155	.00205	.00000	.00006	
%RSD	560.35	261.70	215.40	39.677	.36296	1.6601	
#1	-.00099	.00106	.00038	.00661	-.00124	.00372	
#2	.00166	-.00354	-.00181	.00371	-.00124	.00363	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18416	--	--	--	--	--	--
SDev	62.43670	--	--	--	--	--	--
%RSD	.3390360	--	--	--	--	--	--
#1	18372	--	--	--	--	--	--
#2	18460	--	--	--	--	--	--

Method: METTRA Sample Name: DJ3FD Operator: RJG
 Run Time: 08/28/00 13:58:27
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00038	.11179	.00146	H.50648	.00008	4.3590	.00010
SDev	.00011	.00193	.00001	.00263	.00023	.0238	.00003
%RSD	29.789	1.7261	.40048	.51909	274.19	.54517	36.320

#1	.00030	.11315	.00146	H.50834	-.00008	4.3759	.00007
#2	.00046	.11042	.00145	H.50462	.00024	4.3422	.00012

Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00100	-.00033	-.00124	H.47284	.64361	.00961	.00022
SDev	.00001	.00030	.00005	.00962	.00577	.00005	.00009
%RSD	1.0502	89.544	4.0148	2.0350	.89594	.53866	39.858

#1	-.00101	-.00054	-.00128	H.46603	.64769	.00964	.00028
#2	-.00099	-.00012	-.00121	H.47964	.63954	.00957	.00016

Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00054	.00099	-.00114	-.00043	-.01618	.00025	-.00522
SDev	.00014	.00074	.00023	.00040	.00043	.00062	.00027
%RSD	24.844	74.815	20.161	92.939	2.6535	243.36	5.1748

#1	.00064	.00046	-.00130	-.00071	-.01649	.00069	-.00503
#2	.00045	.00151	-.00097	-.00015	-.01588	-.00018	-.00541

Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00142	.00040	-.00021	.00184	-.00113	.00177
SDev	.00164	.00361	.00295	.00152	.00037	.00003
%RSD	115.11	910.60	1402.7	82.658	32.772	1.9122

#1	-.00258	-.00215	-.00230	.00076	-.00087	.00179
#2	-.00027	.00295	.00188	.00291	-.00139	.00175

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			.00500	.01000	.05000	.02000
Low			-.00500	-.01000	-.05000	-.02000

669 755

Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18497	--	--	--	--	--	--
SDev	91.18087	--	--	--	--	--	--
%RSD	.4929621	--	--	--	--	--	--
#1	18432	--	--	--	--	--	--
#2	18561	--	--	--	--	--	--

Analysis Report

08/28/00 02:06:42 PM

669.756 ✓
page 1

Method: METTRA Sample Name: CCV3-4

Operator: RJG

Run Time: 08/28/00 14:02:37

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0373	23.986	.52063	1.9720	2.1217	52.543	.50629
SDev	.0036	.085	.00049	.0093	.0119	.285	.00152
%RSD	.34894	.35597	.09353	.47112	.56098	.54229	.29994
#1	1.0399	24.046	.52097	1.9785	2.1302	52.745	.50736
#2	1.0347	23.926	.52028	1.9654	2.1133	52.342	.50521
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0524	2.0594	1.9383	25.706	50.770	2.0471	2.0718
SDev	.0059	.0054	.0101	.081	.264	.0081	.0003
%RSD	.28564	.26371	.52078	.31403	.51930	.39725	.01613
#1	2.0565	2.0632	1.9455	25.763	50.957	2.0528	2.0716
#2	2.0483	2.0555	1.9312	25.649	50.584	2.0413	2.0721
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0390	.52341	.51878	.52032	.52852	.51085	.51674
SDev	.0137	.00075	.00540	.00385	.00997	.00028	.00313
%RSD	.67217	.14412	1.0408	.74041	1.8873	.05516	.60644
#1	2.0486	.52395	.52259	.52304	.53558	.51065	.51895
#2	2.0293	.52288	.51496	.51760	.52147	.51105	.51452
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.51306	.52488	.52095	1.0739	2.0496	2.0903	
SDev	.00122	.00617	.00453	.0050	.0113	.0098	
%RSD	.23833	1.1761	.86857	.46890	.55217	.46743	
#1	.51393	.52925	.52414	1.0775	2.0576	2.0972	
#2	.51220	.52052	.51775	1.0704	2.0416	2.0834	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.55000	1.1000	2.2000	2.2000	
Low			.45000	.90000	1.8000	1.8000	

669 757

Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18120	--	--	--	--	--	--
SDev	39.63389	--	--	--	--	--	--
%RSD	.2187328	--	--	--	--	--	--
#1	18092	--	--	--	--	--	--
#2	18148	--	--	--	--	--	--

Analysis Report

08/28/00 02:10:52 PM

669 758
page 1

Method: METTRA Sample Name: CCB4

Operator: RJG

Run Time: 08/28/00 14:06:46

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00025	.09311	.00036	.00048	.00034	.00793	.00023
SDev	.00086	.00505	.00044	.00025	.00000	.00705	.00010
%RSD	337.83	5.4194	122.46	51.546	.42466	88.875	43.146
#1	-.00035	.09668	.00068	.00031	.00034	.00295	.00016
#2	.00086	.08954	.00005	.00066	.00034	.01291	.00030
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00033	.00030	-.00139	.00249	.01100	.00038	.00417
SDev	.00081	.00095	.00085	.01423	.01038	.00017	.00134
%RSD	240.56	313.08	61.530	571.41	94.337	43.640	32.022
#1	-.00023	-.00037	-.00199	-.00757	.00366	.00026	.00512
#2	.00090	.00097	-.00078	.01256	.01834	.00050	.00323
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00052	.00005	.00068	.00047	.00042	.00027	.00032
SDev	.00072	.00173	.00045	.00087	.00030	.00115	.00086
%RSD	138.70	3698.2	65.497	185.61	71.956	421.01	269.69
#1	.00001	.00127	.00100	.00109	.00020	-.00054	-.00029
#2	.00102	-.00118	.00037	-.00015	.00063	.00108	.00093
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00409	.00035	.00160	.00317	-.00062	.00061
SDev	.00008	.00007	.00002	.00462	.00057	.00023
%RSD	1.9339	20.549	1.3802	145.66	91.980	38.503
#1	.00414	.00030	.00158	-.00010	-.00103	.00044
#2	.00403	.00040	.00161	.00644	-.00022	.00078
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			.00500	.01000	.05000	.02000
Low			-.00500	-.01000	-.05000	-.02000

669 759

Analysis Report

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page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18313	--	--	--	--	--	--
SDev	130.7084	--	--	--	--	--	--
%RSD	.7137573	--	--	--	--	--	--
#1	18405	--	--	--	--	--	--
#2	18220	--	--	--	--	--	--

Analysis Report

08/28/00 02:22:01 PM

669 760

page 1

Method: METTRA Sample Name: DJGQ8B

Operator: RJG

Run Time: 08/28/00 14:17:55

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00016	.15874	.00031	.00005	-.00075	.03891	.00011
SDev	.00030	.10007	.00028	.00003	.00014	.00428	.00018
%RSD	185.13	63.041	89.167	59.000	19.139	11.012	168.33

#1	-.00005	H.22951	.00012	.00003	-.00085	.03588	-.00002
#2	.00037	.08798	.00051	.00007	-.00064	.04194	.00024

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00102	.00185	-.00256	.01507	-.00039	-.00011	-.00008
SDev	.00045	.00006	.00249	.01580	.00004	.00003	.00066
%RSD	43.898	3.4154	97.104	104.84	10.476	26.330	806.61

#1	-.00134	.00181	-.00432	.00390	-.00036	-.00009	.00039
#2	-.00070	.00190	-.00080	.02625	-.00042	-.00013	-.00055

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00093	.00296	.00175	.00215	-.00170	.00008	-.00051
SDev	.00034	.00229	.00043	.00047	.00058	.00169	.00093
%RSD	36.343	77.193	24.692	21.981	34.211	2079.8	182.26

#1	.00069	.00458	.00144	.00249	-.00129	-.00111	-.00117
#2	.00117	.00134	.00205	.00182	-.00211	.00128	.00015

Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00729	.00422	.00038	-.00339	-.00100	.00269
SDev	.00062	.00040	.00006	.00061	.00001	.00024
%RSD	8.5509	9.5786	16.094	18.058	.78328	8.8767

#1	-.00773	.00450	.00043	-.00382	-.00101	.00286
#2	-.00685	.00393	.00034	-.00296	-.00100	.00252

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			.00500	.01000	.05000	.02000
Low			-.00500	-.01000	-.05000	-.02000

669 761

Analysis Report

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page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17817	--	--	--	--	--	--
SDev	76.89786	--	--	--	--	--	--
%RSD	.4315952	--	--	--	--	--	--
#1	17872	--	--	--	--	--	--
#2	17763	--	--	--	--	--	--

Analysis Report

08/28/00 02:26:11 PM

page 1

Method: METTRA Sample Name: DJGQ8C

Operator: RJG

Run Time: 08/28/00 14:22:05

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05118	1.8875	2.0492	1.9260	.05237	L.08243	.05163
SDev	.00024	.0136	.0121	.0130	.00023	.00089	.00029
%RSD	.47390	.72032	.59269	.67387	.44248	1.0747	.56780
#1	.05135	1.8972	2.0578	1.9352	.05253	L.08180	.05184
#2	.05101	1.8779	2.0406	1.9169	.05221	L.08305	.05142
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass
High	.06000	2.4000	2.4000	2.4000	.06000	60.000	.06000
Low	.04000	1.6000	1.6000	1.6000	.04000	40.000	.04000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.52563	.20936	.23610	1.0520	L.00290	.51021	L-.00069
SDev	.00339	.00092	.00158	.0006	.00087	.00272	.00090
%RSD	.64428	.43828	.66799	.05255	30.036	.53272	131.55
#1	.52802	.21001	.23721	1.0524	L.00352	.51214	L-.00005
#2	.52323	.20871	.23498	1.0517	L.00229	.50829	L-.00133
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Low
High	.60000	.24000	.30000	1.2000	60.000	.60000	1.2000
Low	.40000	.16000	.20000	.80000	40.000	.40000	.80000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51099	.52013	.51105	.51408	-.00009	-.00005	L-.00006
SDev	.00473	.00131	.00499	.00289	.00007	.00013	.00011
%RSD	.92476	.25239	.97647	.56245	82.277	251.17	173.03
#1	.51433	.51920	.51458	.51612	-.00014	-.00014	L-.00014
#2	.50765	.52105	.50753	.51203	-.00004	.00004	L.00001
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Low
High	.60000			.60000			.60000
Low	.40000			.40000			.40000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	1.9574	2.0013	1.9867	2.0635	.50456	.54160	
SDev	.0064	.0177	.0097	.0024	.00293	.00409	
%RSD	.32884	.88421	.48621	.11558	.58034	.75506	
#1	1.9529	2.0138	1.9935	2.0652	.50663	.54450	
#2	1.9620	1.9887	1.9798	2.0618	.50249	.53871	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			2.4000	2.4000	.60000	.60000	
Low			1.6000	1.6000	.40000	.40000	

669 763

Analysis Report

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page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18003	--	--	--	--	--	--
SDev	90.65192	--	--	--	--	--	--
%RSD	.5035253	--	--	--	--	--	--
#1	17939	--	--	--	--	--	--
#2	18068	--	--	--	--	--	--

Analysis Report

08/28/00 02:30:20 PM

669 764

page 1

Method: METTRA Sample Name: DHX40

Operator: RJG

Run Time: 08/28/00 14:26:15

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00079	88.893	.07526	1.0358	.00568	110.90	.00192
SDev	.00025	.456	.00052	.0068	.00002	.80	.00050
%RSD	31.648	.51327	.68888	.65268	.26650	.71939	26.121
#1	.00062	89.216	.07490	1.0406	.00567	111.46	.00157
#2	.00097	88.571	.07563	1.0310	.00569	110.33	.00228
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06520	.12577	.13816	157.71	22.131	4.2964	.00319
SDev	.00001	.00055	.00051	.65	.133	.0217	.00054
%RSD	.01134	.43462	.36815	.41380	.60086	.50593	16.945
#1	.06520	.12615	.13852	158.17	22.225	4.3118	.00281
#2	.06521	.12538	.13780	157.25	22.037	4.2811	.00358

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.14589	.18381	.18721	.18608	.00728	-.00069	.00197
SDev	.00141	.00234	.00230	.00231	.00177	.00172	.00056
%RSD	.96371	1.2708	1.2306	1.2439	24.364	251.13	28.332
#1	.14490	.18546	.18883	.18771	.00853	-.00190	.00157
#2	.14688	.18216	.18558	.18444	.00603	.00053	.00236

Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00948	.00482	.00006	.00858	.23859	.49502
SDev	.00428	.00193	.00271	.00020	.00112	.00276
%RSD	45.094	40.127	4917.7	2.3478	.47012	.55819
#1	-.01250	.00345	-.00186	.00873	.23939	.49697
#2	-.00646	.00618	.00197	.00844	.23780	.49307

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			10.000	10.000	50.000	5.0000
Low			-.00500	-.01000	-.05000	-.02000

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	19547	--	--	--	--	--	--
SDev	20.18845	--	--	--	--	--	--
%RSD	.1032820	--	--	--	--	--	--
#1	19533	--	--	--	--	--	--
#2	19561	--	--	--	--	--	--

Analysis Report

08/28/00 02:34:30 PM

669 766

page 1

Method: METTRA Sample Name: DHX40P5 Operator: RJG
 Run Time: 08/28/00 14:30:24
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00005	17.997	.01717	.21877	.00107	23.835	.00045
SDev	.00034	.068	.00058	.00108	.00005	.062	.00003
%RSD	753.09	.37511	3.3924	.49547	4.5732	.25987	7.3045
#1	.00029	17.949	.01676	.21800	.00103	23.792	.00047
#2	-.00020	18.044	.01758	.21953	.00110	23.879	.00042

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01409	.02687	.02618	33.459	4.6061	.90810	-.00005
SDev	.00013	.00043	.00001	.166	.0091	.00357	.00043
%RSD	.90324	1.5966	.03713	.49494	.19743	.39272	929.97
#1	.01400	.02717	.02619	33.342	4.5996	.90558	.00026
#2	.01418	.02657	.02617	33.576	4.6125	.91062	-.00035

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03195	.03646	.04056	.03920	.00353	-.00114	.00042
SDev	.00019	.00036	.00051	.00046	.00154	.00019	.00064
%RSD	.59830	.97264	1.2514	1.1651	43.603	16.331	152.34
#1	.03208	.03671	.04092	.03952	.00462	-.00100	.00087
#2	.03181	.03621	.04021	.03887	.00244	-.00127	-.00003

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00108	.00267	.00142	.00534	.05080	.10699
SDev	.00166	.00130	.00031	.00195	.00005	.00063
%RSD	152.92	48.590	22.087	36.541	.10206	.58824
#1	.00009	.00176	.00120	.00396	.05084	.10655
#2	-.00226	.00359	.00164	.00671	.05077	.10744

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Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18565	--	--	--	--	--	--
SDev	34.36511	--	--	--	--	--	--
%RSD	.1851100	--	--	--	--	--	--
#1	18589	--	--	--	--	--	--
#2	18540	--	--	--	--	--	--

Analysis Report

08/28/00 02:38:39 PM

669 768

page 1

Method: METTRA Sample Name: DHX40S

Operator: RJG

Run Time: 08/28/00 14:34:33

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04754	87.222	1.9014	2.8134	.05290	93.715	.04645
SDev	.00011	.394	.0105	.0164	.00033	.687	.00001
%RSD	.22911	.45203	.55214	.58131	.62400	.73332	.02353
#1	.04761	87.501	1.9089	2.8249	.05313	94.201	.04644
#2	.04746	86.943	1.8940	2.8018	.05267	93.229	.04646
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.52744	.30209	.36629	160.39	21.802	5.0861	.00261
SDev	.00313	.00118	.00167	.80	.143	.0292	.00079
%RSD	.59346	.38906	.45466	.49630	.65650	.57374	30.411
#1	.52966	.30292	.36747	160.96	21.904	5.1067	.00205
#2	.52523	.30126	.36511	159.83	21.701	5.0655	.00317
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.60469	.60952	.59620	.60064	.00517	.00183	.00294
SDev	.00436	.00027	.00701	.00477	.00313	.00145	.00201
%RSD	.72034	.04433	1.1761	.79365	60.557	78.926	68.179
#1	.60777	.60972	.60116	.60401	.00738	.00285	.00436
#2	.60161	.60933	.59124	.59727	.00296	.00081	.00152
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	1.7638	1.7934	1.7835	1.9043	.67446	.96521	
SDev	.0037	.0182	.0109	.0118	.00690	.00630	
%RSD	.21229	1.0138	.61002	.61715	1.0228	.65241	
#1	1.7611	1.8063	1.7912	1.9126	.67933	.96966	
#2	1.7664	1.7805	1.7758	1.8960	.66958	.96076	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	19566	--	--	--	--	--	--
SDev	98.14697	--	--	--	--	--	--
%RSD	.5016329	--	--	--	--	--	--
#1	19496	--	--	--	--	--	--
#2	19635	--	--	--	--	--	--

Analysis Report

08/28/00 02:42:49 PM

669 770
page 1

Method: METTRA Sample Name: DHX40D Operator: RJG
 Run Time: 08/28/00 14:38:43
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04880	101.32	1.9388	2.9670	.05350	99.542	.04690
SDev	.00035	.25	.0052	.0150	.00032	.640	.00003
%RSD	.71162	.24902	.26639	.50611	.59191	.64328	.07355
#1	.04855	101.50	1.9425	2.9777	.05372	99.995	.04693
#2	.04904	101.14	1.9352	2.9564	.05328	99.089	.04688
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.53440	.32910	.40351	163.97	23.114	5.3630	.00197
SDev	.00096	.00127	.00203	.53	.123	.0198	.00001
%RSD	.17933	.38698	.50387	.32326	.53281	.36992	.72185
#1	.53508	.33000	.40495	164.34	23.201	5.3770	.00198
#2	.53372	.32820	.40208	163.59	23.027	5.3490	.00196
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.62362	.69932	.68403	.68912	.00688	.00417	.00507
SDev	.00674	.00049	.00761	.00524	.00123	.00198	.00173
%RSD	1.0804	.07011	1.1130	.76058	17.822	47.353	34.012
#1	.62838	.69967	.68941	.69283	.00602	.00277	.00385
#2	.61885	.69898	.67865	.68542	.00775	.00557	.00629
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.7939	1.8390	1.8240	1.9429	.72009	1.0363
SDev	.0029	.0152	.0111	.0003	.00545	.0049
%RSD	.16298	.82904	.61090	.01570	.75680	.46889
#1	1.7960	1.8498	1.8319	1.9431	.72394	1.0398
#2	1.7918	1.8282	1.8161	1.9427	.71623	1.0329
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			10.000	10.000	50.000	5.0000
Low			-.00500	-.01000	-.05000	-.02000

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Analysis Report

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page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	19402	--	--	--	--	--	--
SDev	55.54241	--	--	--	--	--	--
%RSD	.2862705	--	--	--	--	--	--
#1	19363	--	--	--	--	--	--
#2	19441	--	--	--	--	--	--

Analysis Report

08/28/00 02:46:58 PM

page 1

Method: METTRA Sample Name: DHX47

Operator: RJG

Run Time: 08/28/00 14:42:53

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00089	75.854	.08268	1.0417	.00563	63.145	.00162
SDev	.00038	.381	.00131	.0042	.00007	.117	.00064
%RSD	43.288	.50182	1.5831	.40651	1.3329	.18561	39.607
#1	.00116	75.585	.08176	1.0387	.00558	63.062	.00116
#2	.00062	76.123	.08361	1.0447	.00568	63.227	.00207
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06858	.11715	.16779	158.83	20.048	5.2011	.00386
SDev	.00047	.00015	.00054	.51	.078	.0266	.00003
%RSD	.68777	.12548	.32234	.31852	.39061	.51186	.66303
#1	.06825	.11705	.16741	158.48	19.993	5.1823	.00384
#2	.06892	.11725	.16817	159.19	20.104	5.2199	.00387
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.14809	.25666	.24956	.25192	.00846	.00302	.00483
SDev	.00100	.00107	.00153	.00066	.00151	.00341	.00277
%RSD	.67382	.41784	.61171	.26242	17.823	112.69	57.382
#1	.14880	.25742	.24848	.25145	.00953	.00543	.00680
#2	.14738	.25590	.25063	.25239	.00740	.00061	.00287
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00791	.00560	.00110	.00809	.19432	.63280	
SDev	.00089	.00234	.00126	.00021	.00017	.00087	
%RSD	11.271	41.762	114.83	2.5452	.08973	.13687	
#1	-.00854	.00725	.00199	.00795	.19419	.63219	
#2	-.00728	.00395	.00021	.00824	.19444	.63341	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	19592	--	--	--	--	--	--
SDev	73.04469	--	--	--	--	--	--
%RSD	.3728310	--	--	--	--	--	--
#1	19644	--	--	--	--	--	--
#2	19540	--	--	--	--	--	--

Analysis Report

08/28/00 02:51:08 PM

669 774
page 1

Method: METTRA Sample Name: DHX4A

Operator: RJG

Run Time: 08/28/00 14:47:02

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00043	62.160	.07655	.93174	.00558	40.588	.00229
SDev	.00019	.078	.00058	.00251	.00001	.149	.00010
%RSD	44.882	.12478	.76111	.26899	.10738	.36701	4.5225
#1	.00030	62.215	.07697	.93352	.00558	40.694	.00221
#2	.00057	62.105	.07614	.92997	.00557	40.483	.00236
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06915	.10009	.15624	154.59	19.187	4.8409	.00385
SDev	.00013	.00001	.00005	.15	.051	.0077	.00103
%RSD	.19279	.00546	.03452	.09773	.26734	.15825	26.803
#1	.06925	.10008	.15620	154.70	19.224	4.8463	.00458
#2	.06906	.10009	.15628	154.49	19.151	4.8354	.00312
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.15271	.20252	.19693	.19879	.00479	.00265	.00336
SDev	.00130	.00188	.00153	.00040	.00101	.00110	.00040
%RSD	.85464	.92891	.77828	.19913	21.079	41.574	11.828
#1	.15363	.20119	.19802	.19907	.00408	.00343	.00364
#2	.15179	.20385	.19585	.19851	.00551	.00187	.00308
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00881	.00602	.00108	.00636	.18263	.56121	
SDev	.00019	.00221	.00141	.00271	.00086	.00157	
%RSD	2.1169	36.713	130.88	42.526	.47242	.27918	
#1	-.00868	.00446	.00008	.00828	.18202	.56231	
#2	-.00895	.00758	.00208	.00445	.18324	.56010	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

669 775

Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	19747	--	--	--	--	--	--
SDev	45.74926	--	--	--	--	--	--
%RSD	.2316764	--	--	--	--	--	--
#1	19715	--	--	--	--	--	--
#2	19779	--	--	--	--	--	--

Analysis Report

08/28/00 02:55:17 PM

669.776 ✓
page 1

Method: METTRA Sample Name: CCV3-5

Operator: RJG

Run Time: 08/28/00 14:51:12

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0386	23.920	.52234	1.9603	2.1284	52.545	.50723
SDev	.0057	.129	.00266	.0123	.0175	.450	.00355
%RSD	.54995	.53990	.50999	.62562	.82216	.85715	.69913
#1	1.0426	24.011	.52422	1.9689	2.1408	52.863	.50973
#2	1.0346	23.828	.52045	1.9516	2.1160	52.226	.50472
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0572	2.0642	1.9355	25.890	50.911	2.0428	2.0788
SDev	.0123	.0117	.0109	.162	.368	.0123	.0002
%RSD	.59880	.56733	.56483	.62428	.72237	.60211	.01024
#1	2.0659	2.0724	1.9432	26.004	51.171	2.0515	2.0787
#2	2.0485	2.0559	1.9277	25.775	50.651	2.0341	2.0790
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0281	.52638	.51737	.52037	.52722	.51295	.51770
SDev	.0203	.00020	.00678	.00458	.00578	.00337	.00418
%RSD	.99971	.03758	1.3097	.88116	1.0970	.65784	.80678
#1	2.0424	.52652	.52216	.52361	.53131	.51534	.52066
#2	2.0137	.52624	.51258	.51713	.52313	.51057	.51475
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.51706	.52523	.52251	1.0662	2.0393	2.0866	
SDev	.00037	.00477	.00330	.0039	.0171	.0136	
%RSD	.07124	.90723	.63174	.36759	.83766	.65350	
#1	.51732	.52860	.52485	1.0690	2.0514	2.0962	
#2	.51680	.52186	.52018	1.0634	2.0272	2.0770	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.55000	1.1000	2.2000	2.2000	
Low			.45000	.90000	1.8000	1.8000	

669 777

Analysis Report

08/28/00 02:55:17 PM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18245	--	--	--	--	--	--
SDev	37.97246	--	--	--	--	--	--
%RSD	.2081213	--	--	--	--	--	--
#1	18218	--	--	--	--	--	--
#2	18272	--	--	--	--	--	--

Analysis Report

08/28/00 02:59:27 PM

669 778

page 1

Method: METTRA Sample Name: CCB5

Operator: RJG

Run Time: 08/28/00 14:55:21

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00035	.12943	.00101	.00039	-.00055	.00811	.00016
SDev	.00004	.01888	.00144	.00011	.00059	.00191	.00007
%RSD	12.763	14.588	142.20	27.842	106.85	23.554	46.212

#1	.00038	.14278	.00202	.00047	-.00097	.00946	.00021
#2	.00031	.11608	-.00001	.00031	-.00013	.00676	.00011

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00022	.00026	-.00158	.01276	.01079	.00076	.00396
SDev	.00014	.00024	.00069	.00179	.00056	.00004	.00175
%RSD	62.917	92.996	43.854	14.054	5.2225	5.5477	44.215

#1	.00032	.00043	-.00109	.01149	.01039	.00079	.00519
#2	.00012	.00009	-.00208	.01403	.01119	.00073	.00272

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00051	.00028	-.00037	-.00015	-.00021	-.00002	-.00009
SDev	.00009	.00137	.00040	.00072	.00081	.00240	.00187
%RSD	17.983	487.75	109.40	476.65	379.77	10468.	2174.9

#1	.00044	-.00069	-.00065	-.00066	.00036	.00168	.00124
#2	.00057	.00125	-.00008	.00036	-.00078	-.00172	-.00141

Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00015	.00104	.00074	.00189	-.00033	.00062
SDev	.00225	.00166	.00186	.00015	.00016	.00030
%RSD	1498.4	159.70	249.51	7.6607	49.053	49.443

#1	-.00144	-.00013	-.00057	.00179	-.00044	.00083
#2	.00174	.00222	.00206	.00199	-.00022	.00040

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			.00500	.01000	.05000	.02000
Low			-.00500	-.01000	-.05000	-.02000

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17865	--	--	--	--	--	--
SDev	455.5894	--	--	--	--	--	--
%RSD	2.550157	--	--	--	--	--	--
#1	17543	--	--	--	--	--	--
#2	18187	--	--	--	--	--	--

Analysis Report

08/28/00 03:03:36 PM

6691780
page 1

Method: METTRA Sample Name: DJGQAB

Operator: RJG

Run Time: 08/28/00 14:59:30

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00015	.12475	-.00019	.00027	-.00043	.05957	.00008
SDev	.00040	.01246	.00067	.00004	.00003	.00168	.00009
%RSD	266.21	9.9879	353.07	16.395	7.6652	2.8198	115.34
#1	-.00013	.13356	-.00067	.00024	-.00041	.05838	.00002
#2	.00043	.11594	.00029	.00030	-.00045	.06075	.00015
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00041	.00020	-.00232	.01119	.00103	.00024	.00065
SDev	.00016	.00019	.00046	.00705	.00300	.00006	.00059
%RSD	39.365	93.079	19.679	62.969	289.92	26.468	90.680
#1	-.00052	.00007	-.00264	.00621	-.00109	.00019	.00107
#2	-.00029	.00034	-.00200	.01617	.00316	.00028	.00023
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00044	.00239	-.00017	.00068	-.00011	.00056	.00034
SDev	.00019	.00080	.00000	.00026	.00027	.00088	.00050
%RSD	43.991	33.317	1.1081	38.755	246.13	156.59	146.80
#1	.00030	.00182	-.00017	.00049	-.00031	.00119	.00069
#2	.00057	.00295	-.00017	.00087	.00008	-.00006	-.00001
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00431	.00253	.00025	.00200	-.00075	.00411	
SDev	.00062	.00005	.00017	.00206	.00038	.00006	
%RSD	14.276	2.0086	67.789	103.16	50.978	1.4165	
#1	-.00388	.00250	.00037	.00346	-.00102	.00415	
#2	-.00475	.00257	.00013	.00054	-.00048	.00407	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18115	--	--	--	--	--	--
SDev	14.17666	--	--	--	--	--	--
%RSD	.0782578	--	--	--	--	--	--
#1	18105	--	--	--	--	--	--
#2	18125	--	--	--	--	--	--

Analysis Report

08/28/00 03:07:45 PM

669 782
page 1

Method: METTRA Sample Name: DJGQAC

Operator: RJG

Run Time: 08/28/00 15:03:40

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05499	2.3444	2.1648	2.0582	.05454	55.435	.05267
SDev	.00100	.0378	.0272	.0236	.00002	.567	.00088
%RSD	1.8259	1.6140	1.2545	1.1443	.03597	1.0220	1.6734
#1	.05428	2.3176	2.1456	2.0416	.05452	55.034	.05205
#2	.05570	2.3711	2.1840	2.0749	.05455	55.836	.05330
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.06000	2.4000	2.4000	2.4000	.06000	60.000	.06000
Low	.04000	1.6000	1.6000	1.6000	.04000	40.000	.04000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.54018	.21681	.25740	1.0155	53.557	.53371	1.0918
SDev	.00882	.00387	.00356	.0119	.654	.00712	.0197
%RSD	1.6337	1.7869	1.3834	1.1721	1.2204	1.3343	1.8047
#1	.53394	.21407	.25488	1.0071	53.095	.52868	1.0779
#2	.54642	.21955	.25992	1.0239	54.020	.53875	1.1057
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.60000	.24000	.30000	1.2000	60.000	.60000	1.2000
Low	.40000	.16000	.20000	.80000	40.000	.40000	.80000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.53288	.56027	.53596	.54406	.52567	.52446	.52486
SDev	.00241	.00835	.01154	.01048	.01594	.00997	.01196
%RSD	.45125	1.4900	2.1529	1.9256	3.0330	1.9016	2.2789
#1	.53118	.55437	.52780	.53665	.51440	.51741	.51641
#2	.53458	.56618	.54412	.55146	.53695	.53151	.53332
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.60000			.60000			.60000
Low	.40000			.40000			.40000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	2.1136	2.1355	2.1282	2.3153	.53218	.57351	
SDev	.0284	.0466	.0406	.0321	.00862	.00699	
%RSD	1.3442	2.1844	1.9065	1.3874	1.6199	1.2184	
#1	2.0935	2.1026	2.0996	2.2925	.52608	.56857	
#2	2.1337	2.1685	2.1569	2.3380	.53828	.57845	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			2.4000	2.4000	.60000	.60000	
Low			1.6000	1.6000	.40000	.40000	

669 783

Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17933	--	--	--	--	--	--
SDev	218.8841	--	--	--	--	--	--
%RSD	1.220584	--	--	--	--	--	--
#1	18088	--	--	--	--	--	--
#2	17778	--	--	--	--	--	--

Analysis Report

08/28/00 03:11:55 PM

669 784

page 1

Method: METTRA Sample Name: DJENL

Operator: RJG

Run Time: 08/28/00 15:07:49

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00307	65.428	.06624	.57979	.00881	65.731	.04434
SDev	.00023	.492	.00022	.00375	.00010	.641	.00057
%RSD	7.6254	.75233	.33950	.64656	1.1167	.97583	1.2950
#1	.00290	65.776	.06608	.58244	.00874	66.185	.04475
#2	.00324	65.080	.06640	.57714	.00888	65.278	.04394
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08906	.46716	.59809	232.14	17.700	4.0549	.14461
SDev	.00126	.00435	.00479	1.80	.169	.0350	.00102
%RSD	1.4161	.93186	.80175	.77537	.95222	.86192	.70293
#1	.08995	.47023	.60148	233.41	17.819	4.0796	.14532
#2	.08817	.46408	.59470	230.87	17.581	4.0301	.14389
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.33496	.49341	.48552	.48814	.00543	.00432	.00469
SDev	.00138	.00369	.01155	.00893	.00287	.00108	.00023
%RSD	.41129	.74715	2.3797	1.8302	52.831	25.003	5.0020
#1	.33593	.49601	.49369	.49446	.00745	.00355	.00485
#2	.33398	.49080	.47735	.48183	.00340	.00508	.00452
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00363	.00988	.00538	.00441	.16090	1.7178	
SDev	.00286	.00359	.00144	.00098	.00112	.0150	
%RSD	78.697	36.314	26.780	22.162	.69906	.87300	
#1	-.00565	.01241	.00640	.00511	.16169	1.7284	
#2	-.00161	.00734	.00436	.00372	.16010	1.7072	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

669 785

Analysis Report

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page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	19001	--	--	--	--	--	--
SDev	158.0384	--	--	--	--	--	--
%RSD	.8317305	--	--	--	--	--	--
#1	18889	--	--	--	--	--	--
#2	19113	--	--	--	--	--	--

Analysis Report

08/28/00 03:16:04 PM

669 786
page 1

Method: METTRA Sample Name: DJENLP5

Operator: RJG

Run Time: 08/28/00 15:11:59

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00102	12.900	.01354	.11862	.00154	13.702	.00935
SDev	.00028	.049	.00056	.00036	.00008	.026	.00004
%RSD	27.298	.38301	4.1255	.30413	5.3616	.18904	.43825
#1	.00121	12.866	.01394	.11837	.00160	13.720	.00932
#2	.00082	12.935	.01315	.11888	.00148	13.684	.00938
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01843	.09786	.11506	47.797	3.5913	.83247	.02969
SDev	.00031	.00017	.00048	.084	.0042	.00196	.00055
%RSD	1.6757	.17884	.41817	.17504	.11567	.23581	1.8492
#1	.01865	.09799	.11472	47.738	3.5883	.83108	.03008
#2	.01822	.09774	.11540	47.856	3.5942	.83386	.02930
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07194	.10259	.09998	.10085	-.00028	.00180	.00111
SDev	.00117	.00156	.00214	.00091	.00177	.00219	.00205
%RSD	1.6201	1.5189	2.1441	.90332	634.01	121.94	185.38
#1	.07277	.10148	.10150	.10149	-.00153	.00025	-.00034
#2	.07112	.10369	.09847	.10020	.00097	.00335	.00255
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00093	.00189	.00157	.00308	.03273	.36478	
SDev	.00035	.00249	.00154	.00294	.00029	.00037	
%RSD	37.901	131.33	97.892	95.291	.87760	.10087	
#1	.00118	.00014	.00048	.00516	.03293	.36504	
#2	.00068	.00365	.00266	.00101	.03253	.36452	

669 787

Analysis Report

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page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18489	--	--	--	--	--	--
SDev	57.77007	--	--	--	--	--	--
%RSD	.3124522	--	--	--	--	--	--
#1	18530	--	--	--	--	--	--
#2	18448	--	--	--	--	--	--

Analysis Report

08/28/00 03:20:14 PM

669 786

page 1

Method: METTRA Sample Name: DJENLS

Operator: RJG

Run Time: 08/28/00 15:16:08

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05496	126.01	1.9870	2.7627	.05761	156.13	.09178
SDev	.00024	.32	.0144	.0100	.00011	.95	.00057
%RSD	.44388	.25134	.72496	.36140	.18705	.60964	.62446
#1	.05513	126.23	1.9972	2.7698	.05768	156.81	.09137
#2	.05479	125.79	1.9768	2.7557	.05753	155.46	.09218
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.57373	.80637	1.1623	213.82	73.612	5.8666	1.1398
SDev	.00115	.00250	.0043	.77	.367	.0188	.0019
%RSD	.20023	.31014	.37315	.36037	.49897	.32109	.16781
#1	.57454	.80814	1.1654	214.37	73.872	5.8799	1.1412
#2	.57292	.80460	1.1593	213.28	73.352	5.8533	1.1385
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.81523	1.0209	.99367	1.0027	.23143	.23401	.23315
SDev	.00472	.0013	.01715	.0119	.00627	.00183	.00087
%RSD	.57950	.13173	1.7263	1.1857	2.7108	.78083	.37329
#1	.81857	1.0218	1.0058	1.0111	.23586	.23271	.23376
#2	.81189	1.0199	.98154	.99433	.22699	.23530	.23253
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	1.8512	1.9039	1.8863	2.0307	.71833	2.3404	
SDev	.0008	.0205	.0139	.0150	.00386	.0155	
%RSD	.04333	1.0756	.73829	.73876	.53709	.66041	
#1	1.8518	1.9184	1.8962	2.0413	.72105	2.3514	
#2	1.8506	1.8894	1.8765	2.0201	.71560	2.3295	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18714	--	--	--	--	--	--
SDev	141.3509	--	--	--	--	--	--
%RSD	.7553137	--	--	--	--	--	--
#1	18614	--	--	--	--	--	--
#2	18814	--	--	--	--	--	--

Analysis Report

08/28/00 03:24:24 PM

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page 1

Method: METTRA Sample Name: DJENLD

Operator: RJG

Run Time: 08/28/00 15:20:18

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05599	129.72	2.0082	2.7553	.05913	135.82	.09064
SDev	.00003	.70	.0097	.0173	.00021	.97	.00045
%RSD	.04644	.54192	.48400	.62683	.35009	.71774	.49465
#1	.05601	130.22	2.0151	2.7675	.05928	136.51	.09032
#2	.05597	129.23	2.0014	2.7431	.05898	135.13	.09096
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.60019	.84389	1.3093	275.81	71.263	6.5959	1.1732
SDev	.00263	.00386	.0089	1.65	.476	.0339	.0035
%RSD	.43883	.45776	.67980	.59713	.66792	.51467	.29974
#1	.60206	.84663	1.3156	276.98	71.600	6.6199	1.1757
#2	.59833	.84116	1.3030	274.65	70.926	6.5719	1.1708
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.84998	1.0596	1.0318	1.0410	.24973	.24751	.24825
SDev	.00816	.0044	.0134	.0104	.00724	.00082	.00186
%RSD	.96038	.41787	1.2967	.99886	2.8985	.33069	.75102
#1	.85575	1.0627	1.0413	1.0484	.25485	.24693	.24957
#2	.84421	1.0564	1.0223	1.0337	.24461	.24809	.24693
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	1.8637	1.9296	1.9077	2.0358	.75610	2.5255	
SDev	.0068	.0247	.0187	.0125	.00501	.0200	
%RSD	.36562	1.2779	.98111	.61399	.66235	.79233	
#1	1.8685	1.9471	1.9209	2.0446	.75964	2.5397	
#2	1.8589	1.9122	1.8944	2.0270	.75256	2.5114	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18896	--	--	--	--	--	--
SDev	111.0862	--	--	--	--	--	--
%RSD	.5878665	--	--	--	--	--	--
#1	18818	--	--	--	--	--	--
#2	18975	--	--	--	--	--	--

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Analysis Report

08/28/00 03:28:34 PM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	19550	--	--	--	--	--	--
SDev	20.71878	--	--	--	--	--	--
%RSD	.1059781	--	--	--	--	--	--
#1	19565	--	--	--	--	--	--
#2	19535	--	--	--	--	--	--

Analysis Report

08/28/00 03:28:34 PM

page 1

Method: METTRA Sample Name: DJENX

Operator: RJG

Run Time: 08/28/00 15:24:28

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00108	58.430	.10302	.91260	.00841	15.949	.02187
SDev	.00011	.000	.00012	.00042	.00005	.036	.00002
%RSD	10.205	.00036	.11986	.04645	.61436	.22397	.11020
#1	.00100	58.430	.10311	.91290	.00837	15.975	.02188
#2	.00115	58.430	.10293	.91230	.00844	15.924	.02185
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09669	.19421	.24211	231.37	12.365	4.5136	.22706
SDev	.00000	.00070	.00036	.17	.006	.0020	.00031
%RSD	.00332	.35977	.15011	.07197	.04663	.04335	.13751
#1	.09669	.19372	.24185	231.49	12.369	4.5150	.22684
#2	.09670	.19471	.24237	231.25	12.361	4.5122	.22728
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.21514	.40436	.40515	.40489	.00595	.00253	.00367
SDev	.00079	.00462	.00765	.00357	.00623	.00368	.00038
%RSD	.36686	1.1433	1.8888	.88043	104.70	145.52	10.424
#1	.21570	.40109	.41056	.40741	.01035	-.00007	.00340
#2	.21458	.40763	.39974	.40237	.00154	.00513	.00394
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00272	.01011	.00584	.00306	.18604	.93152	
SDev	.00337	.00246	.00052	.00216	.00251	.00243	
%RSD	124.12	24.336	8.8625	70.719	1.3513	.26075	
#1	-.00510	.01185	.00620	.00459	.18426	.93324	
#2	-.00033	.00837	.00547	.00153	.18782	.92981	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

Method: METTRA Sample Name: DJEP5

Operator: RJG

Run Time: 08/28/00 15:28:37

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00038	55.321	.04974	1.1116	.00639	17.151	.00413
SDev	.00060	.334	.00052	.0086	.00008	.116	.00020
%RSD	156.49	.60368	1.0554	.77290	1.2519	.67470	4.9662
#1	-.00004	55.557	.05011	1.1176	.00633	17.233	.00428
#2	.00080	55.084	.04937	1.1055	.00645	17.069	.00399
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07179	.11368	.12963	199.22	12.389	4.9431	.05907
SDev	.00051	.00018	.00068	1.21	.087	.0298	.00025
%RSD	.71275	.15537	.52138	.60734	.70117	.60222	.42319
#1	.07215	.11380	.13011	200.08	12.450	4.9642	.05924
#2	.07143	.11355	.12916	198.37	12.327	4.9221	.05889
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.13600	.12347	.12246	.12279	.00304	.00078	.00153
SDev	.00101	.00038	.00040	.00014	.00067	.00087	.00080
%RSD	.74038	.30633	.32584	.11417	21.929	111.50	52.279
#1	.13671	.12320	.12274	.12289	.00257	.00016	.00097
#2	.13528	.12374	.12217	.12270	.00351	.00139	.00210
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00612	.00864	.00372	.00379	.12429	.42504	
SDev	.00101	.00049	.00001	.00037	.00053	.00266	
%RSD	16.539	5.6455	.32057	9.7798	.43005	.62541	
#1	-.00684	.00898	.00371	.00406	.12467	.42692	
#2	-.00541	.00829	.00373	.00353	.12391	.42316	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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Analysis Report

08/28/00 03:32:43 PM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	19370	--	--	--	--	--	--
SDev	99.56119	--	--	--	--	--	--
%RSD	.5139968	--	--	--	--	--	--
#1	19300	--	--	--	--	--	--
#2	19440	--	--	--	--	--	--

Analysis Report

08/28/00 03:36:53 PM

669 796
page 1

Method: METTRA Sample Name: CCV3-6

Operator: RJG

Run Time: 08/28/00 15:32:47

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0066	23.110	.50397	1.8994	2.0670	50.849	.48910
SDev	.0509	1.235	.02754	.0959	.1021	2.460	.02451
%RSD	5.0520	5.3442	5.4645	5.0474	4.9415	4.8374	5.0123
#1	.97060	22.236	.48450	1.8316	1.9948	49.110	.47176
#2	1.0425	23.983	.52344	1.9672	2.1392	52.589	.50643
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9847	1.9950	1.8771	25.054	49.428	1.9759	2.0089
SDev	.1022	.1057	.0971	1.316	2.517	.1028	.1201
%RSD	5.1489	5.2960	5.1712	5.2513	5.0930	5.2007	5.9777
#1	1.9125	1.9203	1.8084	24.123	47.647	1.9032	1.9240
#2	2.0570	2.0697	1.9457	25.984	51.208	2.0485	2.0938
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9564	.51018	.49744	.50168	.51067	.49802	.50223
SDev	.0921	.02280	.02686	.02551	.02513	.02224	.02320
%RSD	4.7087	4.4690	5.3998	5.0846	4.9206	4.4653	4.6195
#1	1.8913	.49406	.47844	.48364	.49290	.48229	.48583
#2	2.0216	.52630	.51643	.51972	.52844	.51374	.51864
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50295	.50968	.50744	1.0341	1.9754	2.0150
SDev	.01825	.02793	.02470	.0554	.0978	.0995
%RSD	3.6283	5.4793	4.8684	5.3611	4.9533	4.9359
#1	.49004	.48993	.48997	.99493	1.9062	1.9447
#2	.51585	.52943	.52491	1.0733	2.0446	2.0853
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			.55000	1.1000	2.2000	2.2000
Low			.45000	.90000	1.8000	1.8000

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18610	--	--	--	--	--	--
SDev	824.8760	--	--	--	--	--	--
%RSD	4.432428	--	--	--	--	--	--
#1	19193	--	--	--	--	--	--
#2	18027	--	--	--	--	--	--

Analysis Report

08/28/00 03:41:02 PM

669 798
page 1

Method: METTRA Sample Name: CCB6

Operator: RJG

Run Time: 08/28/00 15:36:57

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS ¹	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00035	.15724	.00105	.00053	.00009	.00905	.00010
SDev	.00005	.01601	.00090	.00015	.00025	.00565	.00004
%RSD	14.782	10.181	85.482	28.709	278.45	62.429	36.868
#1	.00031	.16856	.00042	.00042	-.00009	.00506	.00007
#2	.00039	.14592	.00168	.00063	.00027	.01305	.00012
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00061	.00054	-.00278	.03347	.01434	.00087	.00494
SDev	.00010	.00039	.00029	.00049	.00269	.00021	.00152
%RSD	17.113	72.844	10.398	1.4482	18.755	24.168	30.837
#1	.00053	.00026	-.00299	.03381	.01244	.00072	.00601
#2	.00068	.00082	-.00258	.03313	.01624	.00102	.00386
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00098	.00021	.00138	.00099	.00011	.00125	.00087
SDev	.00084	.00116	.00033	.00061	.00069	.00007	.00018
%RSD	86.084	549.16	24.157	61.486	655.32	5.8732	20.874
#1	.00038	-.00061	.00114	.00056	.00059	.00119	.00099
#2	.00157	.00103	.00161	.00142	-.00038	.00130	.00074
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V ₁	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00155	-.00028	.00033	.00398	-.00008	.00107	
SDev	.00270	.00173	.00026	.00446	.00019	.00006	
%RSD	174.19	627.16	76.888	111.92	245.28	5.1684	
#1	.00346	-.00150	.00015	.00713	-.00021	.00111	
#2	-.00036	.00095	.00051	.00083	.00006	.00103	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18229	--	--	--	--	--	--
SDev	43.02717	--	--	--	--	--	--
%RSD	.2360360	--	--	--	--	--	--
#1	18260	--	--	--	--	--	--
#2	18199	--	--	--	--	--	--

Metals Preparation Log



STL Pittsburgh
450 William Pitt Way
Pittsburgh, PA 15238
412-820-8380

Method: 3050 B		Matrix: Soil	Start Time: 0620	SDG: _____	Balance# 94817	Reagents:	
Analyst: Jeffery O. Swartz		Date: 8-28-00	Lot Number: COH160154		Lab Lot No. (book, page, line)		
Reviewed by: _____		Date: 8-28-00	MS-81FEV		MS-81FEV		
Sample ID	Init Wt/Vol g/mL	Final Vol mL	Comments		Color		
			Pre	Post	Pre	Post	
1. DHX40	1.00g	100 mL					
2. DHX40S							
3. DHX40D							
4. DHX47							
5. DHX4A							
6. DTGQ8B	1 mL H ₂ O						
7. DTGQ8C							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							
21.							
22.							
23.							
24.							

Digestate(s)	Date	Time	Analyst	Location	Date	Time	Analyst	Location	Hot plate /Block Temp	Correction Factor	Color
AW 4005	8-28-00	0755	Jeffery O. Swartz	Metals Lab	8-28-00	1000	Jeffery O. Swartz	Metals Lab	#6	-0.2%	R=Red BL=Blue BR=Brown BLK=Black Y=Yellow O=Orange
AT 4005	8-28-00	1245	Jeffery O. Swartz	Metals Lab	8-28-00	1505	Jeffery O. Swartz	Metals Lab	Texture F=Fine M=Medium C=Coarse	Clarity C=Clear CL=Cloudy O=Opaque	V=Violet P=Pink W=White GY=Gray GN=Green C=Colorless

669 801

PSR024 8/28/00 3:18:19 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: FAUSTG

METHOD: QM Inductively Coupled Plasma (6010B Trace)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
1A,B CLP1	DHX40	— — —	261460	399411	A-46-QM	COH160154	001		SOLID	0	3 1
1A,B CLP1	DHX47	— — —	261461	399411	A-46-QM	COH160154	002		SOLID	0	3 1
1A,B CLP1	DHX4A	— — —	261462	399411	A-46-QM	COH160154	003		SOLID	0	3 1
3A CLP1	DJ992	— — —	261466	378257	A-46-QM	COH230127	001		SOLID	0	4 1
3A CLP1	DJ994	— — —	261467	378257	A-46-QM	COH230127	002		SOLID	0	4 1
3A CLP1	DJ995	— — —	261468	378257	A-46-QM	COH230127	003		SOLID	0	10 1
3A CLP1	DJ99D	— — —	261469	378257	A-46-QM	COH230127	004		SOLID	0	6 1
3A CLP1	DJ99K	— — —	261470	378257	A-46-QM	COH230127	005		SOLID	0	6 1
3A CLP1	DJA36	— — —	261471	378257	A-46-QM	COH230205	001		SOLID	0	2 1
3A CLP1	DJA3H	— — —	261472	378257	A-46-QM	COH230205	002		SOLID	0	2 1
3A CLP1	DJA3K	— — —	261473	378257	A-46-QM	COH230205	003		SOLID	0	2 1
3A CLP1	DJA3N	— — —	261474	378257	A-46-QM	COH230205	004		SOLID	0	2 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

Geoffrey O. Ernst
Geoffrey O. Ernst

Geoffrey O. Ernst
Geoffrey O. Ernst

8-28-00 *OS-25*
8-28-00 *0625*

**TCLP
METALS DATA**

STL-Pittsburgh**Cover Page - Inorganic Analysis Data Package**

<u>Client ID</u>	<u>Lab Sample ID:</u>
<u>DF/S1/0228/SDC/026</u>	<u>DHX40T</u>
<u>DF/S1/0228/SDC/026D</u>	<u>DHX40DT</u>
<u>DF/S1/0228/SDC/026S</u>	<u>DHX40ST</u>
<u>DF/S1/0228/SDC/027</u>	<u>DHX47T</u>
<u>DF/S1/0228/SDC/028</u>	<u>DHX4AT</u>

Comments: UXB DUNN FIELD
C0H160154
6010B, 7470A-TCLP

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than conditions detailed above. Release of the data combined in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____

Name: _____

Date: _____

Title: _____

REVIEWED BY: MLW
DATE: 8-23-00

**TCLP
METALS
RESULTS**

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DHX40T **Client ID:** DF/S1/0228/SDC/026
Matrix: TCLP **Units:** mg/L **Prep Date:** 8/21/00 **Prep Batch:** 0234102
Weight: NA **Volume:** 100 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.000045	0.00020	0.000097	B	1	CVAA	8/21/00	10:56

Comments: _____

Version 4.10.2

U Result is less than the MDL
B Result is between MDL and RL

Form 1 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DHX47T Client ID: DF/S1/0228/SDC/027
Matrix: TCLP Units: mg/L Prep Date: 8/21/00 Prep Batch: 0234102
Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.000045	0.00020	0.000045	U	1	CVAA	8/21/00	11:05

Comments: _____

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DHX4AT Client ID: DF/S1/0228/SDC/028
Matrix: TCLP Units: mg/L Prep Date: 8/21/00 Prep Batch: 0234102
Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.000045	0.00020	0.000067	B	1	CVAA	8/21/00	11:06

Comments: _____

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DHX40T Client ID: DF/S1/0228/SDC/026
 Matrix: TCLP Units: mg/L Prep Date: 8/21/00 Prep Batch: 0234110
 Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	193.7	0.030	0.50	0.12	B	1	ICP	8/22/00	8:28
Barium	493.41	0.00041	10.0	0.98	B	1	ICP	8/22/00	8:28
Cadmium	228.80	0.0028	0.10	0.0028	U	1	ICP	8/22/00	8:28
Chromium	267.72	0.0038	0.50	0.0038	U	1	ICP	8/22/00	8:28
Lead	220.35	0.025	0.50	0.025	U	1	ICP	8/22/00	8:28
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	8/22/00	8:28
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	8/22/00	8:28

Comments: C0H160154001

Version 4.10.2

U Result is less than the MDL
 B Result is between MDL and RL

Form 1 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DHX47T Client ID: DF/S1/0228/SDC/027
 Matrix: TCLP Units: mg/L Prep Date: 8/21/00 Prep Batch: 0234110
 Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	193.7	0.030	0.50	0.13	B	1	ICP	8/22/00	8:41
Barium	493.41	0.00041	10.0	1.0	B	1	ICP	8/22/00	8:41
Cadmium	228.80	0.0028	0.10	0.0028	U	1	ICP	8/22/00	8:41
Chromium	267.72	0.0038	0.50	0.0038	U	1	ICP	8/22/00	8:41
Lead	220.35	0.025	0.50	0.025	U	1	ICP	8/22/00	8:41
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	8/22/00	8:41
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	8/22/00	8:41

Comments: C0H160154002

Version 4.10.2

U Result is less than the MDL
 B Result is between MDL and RL

Form 1 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DHX4AT Client ID: DF/S1/0228/SDC/028
 Matrix: TCLP Units: mg/L Prep Date: 8/21/00 Prep Batch: 0234110
 Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	193.7	0.030	0.50	0.15	B	1	ICP	8/22/00	8:51
Barium	493.41	0.00041	10.0	0.95	B	1	ICP	8/22/00	8:51
Cadmium	228.80	0.0028	0.10	0.0028	U	1	ICP	8/22/00	8:51
Chromium	267.72	0.0038	0.50	0.0058	B	1	ICP	8/22/00	8:51
Lead	220.35	0.025	0.50	0.16	B	1	ICP	8/22/00	8:51
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	8/22/00	8:51
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	8/22/00	8:51

Comments: C0H160154003

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: CVAAUnits: ug/LChart Number: 0821HGA.PRNAcceptable Range: 90% - 110%Standard Source: UltraStandard ID: 0057-031-11

			ICV5-1 8/21/00 9:57 AM									
Element	WL/ Mass	True Conc	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	2.5	2.55	102.0								

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICPUnits: ug/LChart Number: J00822A.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0057-005-2

Element	WL/ Mass	True Conc	ICV2-1 8/22/00 8:04 AM		Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
			Found	% Rec								
Arsenic	193.696	1000.0	1003.38	100.3								
Barium	493.409	1000.0	1006.31	100.6								
Cadmium	228.802	1000.0	1019.81	102.0								
Chromium	267.716	1000.0	1021.49	102.1								
Lead	220.353	1000.0	1015.27	101.5								
Selenium	196.026	1000.0	1008.32	100.8								
Silver	328.068	500.0	509.39	101.9								

669 813

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: CVAAUnits: ug/LChart Number: 0821HGA.PRNAcceptable Range: 80% - 120%Standard Source: Inorganic VenturesStandard ID: 0057-031-12

Element	WL/ Mass	True Conc	CCV5-1 8/21/00 10:01 AM		CCV5-2 8/21/00 10:22 AM		CCV5-3 8/21/00 10:41 AM		CCV5-4 8/21/00 11:01 AM		CCV5-5 8/21/00 11:23 AM	
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	5.0	5.04	100.8	5.17	103.4	5.18	103.6	5.22	104.4	5.20	104.0

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPUnits: ug/LChart Number: J00822A.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0057-025-5

Element	WL/ Mass	True Conc	CCV2-1 8/22/00 8:44 AM		CCV2-2 8/22/00 9:06 AM					
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	193.696	5000.0	5061.22	101.2	5194.62	103.9				
Barium	493.409	5000.0	4929.99	98.6	5016.38	100.3				
Cadmium	228.802	5000.0	5105.94	102.1	5132.37	102.6				
Chromium	267.716	5000.0	5006.71	100.1	5056.15	101.1				
Lead	220.353	5000.0	5059.53	101.2	5081.47	101.6				
Selenium	196.026	5000.0	5184.66	103.7	5277.43	105.5				
Silver	328.068	1000.0	1001.52	100.2	1008.72	100.9				

669 815

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: CVAAUnits: ug/LChart Number: 0821HGA.PRN

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICB1 8/21/00 9:59 AM							
			Found	Q	Found	Q	Found	Q	Found	Q
Mercury	253.7	0.2	0.0	U						

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J00822A.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICB1 8/22/00 8:07 AM		Found	Q	Found	Q	Found	Q	Found	Q
			Found	Q								
Arsenic	193.696	500	30.3	U								
Barium	493.409	10000	0.4	U								
Cadmium	228.802	100	2.8	U								
Chromium	267.716	500	3.9	B								
Lead	220.353	500	24.6	U								
Selenium	196.026	250	67.4	U								
Silver	328.068	500	3.1	U								

669 817

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: CVAAUnits: ug/LChart Number: 0821HGA.PRN

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 8/21/00 10:02 AM		CCB2 8/21/00 10:23 AM		CCB3 8/21/00 10:42 AM		CCB4 8/21/00 11:03 AM		CCB5 8/21/00 11:25 AM	
			Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Mercury	253.7	0.2	0.0	U	0.0	U	0.0	U	0.0	U	0.0	U

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J00822A.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 8/22/00 8:47 AM		CCB2 8/22/00 9:09 AM					
			Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	193.696	500	30.3	U	30.3	U				
Barium	493.409	10000	0.6	B	0.4	U				
Cadmium	228.802	100	2.8	U	3.2	B				
Chromium	267.716	500	3.8	U	3.8	U				
Lead	220.353	500	24.6	U	24.6	U				
Selenium	196.026	250	67.4	U	67.4	U				
Silver	328.068	500	3.1	U	3.1	U				

669 819

STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DJ3ACBTMatrix: TCLP Units: mg/L Prep Date: 8/21/00 Prep Batch: 0234102Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.000045	0.00020	0.000070	B	1	CVAA	8/21/00	10:54

Comments: _____

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DJ5H9BTMatrix: TCLP Units: mg/L Prep Date: 8/21/00 Prep Batch: 0234102Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.000045	0.00020	0.000062	B	1	CVAA	8/21/00	10:51

Comments: _____

669 821

STL-Pittsburgh
Metals Data Reporting Form

Preparation Blank ResultsLab Sample ID: DJ3ACBTMatrix: TCLP Units: mg/L Prep Date: 8/21/00 Prep Batch: 0234110Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	193.696	0.030	0.50	0.16	B	1	ICP	8/22/00	8:22
Barium	493.409	0.00041	10.0	0.0020	B	1	ICP	8/22/00	8:22
Cadmium	228.802	0.0028	0.10	0.0028	U	1	ICP	8/22/00	8:22
Chromium	267.716	0.0038	0.50	0.0038	U	1	ICP	8/22/00	8:22
Lead	220.353	0.025	0.50	0.025	U	1	ICP	8/22/00	8:22
Selenium	196.026	0.067	0.25	0.067	U	1	ICP	8/22/00	8:22
Silver	328.068	0.0031	0.50	0.0031	U	1	ICP	8/22/00	8:22

Comments: _____

Version 4.10.2

U Result is less than the MDL
B Result is between MDL and RL

Form 3 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DJ5HPBTMatrix: TCLP Units: mg/L Prep Date: 8/21/00 Prep Batch: 0234110Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	193.696	0.030	0.50	0.030	U	1	ICP	8/22/00	8:19
Barium	493.409	0.00041	10.0	0.00041	U	1	ICP	8/22/00	8:19
Cadmium	228.802	0.0028	0.10	0.0028	U	1	ICP	8/22/00	8:19
Chromium	267.716	0.0038	0.50	0.0038	U	1	ICP	8/22/00	8:19
Lead	220.353	0.025	0.50	0.025	U	1	ICP	8/22/00	8:19
Selenium	196.026	0.067	0.25	0.067	U	1	ICP	8/22/00	8:19
Silver	328.068	0.0031	0.50	0.0031	U	1	ICP	8/22/00	8:19

Comments: _____

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

669 823

STL-Pittsburgh

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICPUnits: ug/LChart Number: J00822A.ARCAcceptable Range: 0% - 0%Standard Source: Inorganic VenturesStandard ID: 0057-011-1

				ICSA 8/22/00 8:10 AM				
Element	WL/ Mass	Reporting Limit	True Conc	Found	Found	Found	Found	Found
Arsenic	193.696	500		-190				
Barium	493.409	10000		2				
Cadmium	228.802	100		-2				
Chromium	267.716	500		2				
Lead	220.353	500		81				
Selenium	196.026	250		29				
Silver	328.068	500		0				

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPUnits: ug/LChart Number: J00822A.ARCAcceptable Range: 80% - 120%Standard Source: Inorganic VenturesStandard ID: 0014-187-1

Element	WL/ Mass	True Conc	ICSAB 8/22/00 8:14 AM		Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
			Found	% Rec								
Arsenic	193.696	1000	874.4	87.4								
Barium	493.409	500	467.7	93.5								
Cadmium	228.802	1000	956.0	95.6								
Chromium	267.716	500	446.4	89.3								
Lead	220.353	1000	985.5	98.6								
Selenium	196.026	1000	970.1	97.0								
Silver	328.068	1000	948.4	94.8								

669 825

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DHX40ST
 Original Sample ID: DHX40T Client ID: DF/S1/0228/SDC/026S
 Matrix: TCLP Units: mg/L Prep Date: 8/21/00 Prep Batch: 0234102
 Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Mercury	253.7	0.000097	B	0.0053		0.005	103.5	1	1	CVAA	8/21/00	10:56	8/21/00	10:58

Comments: _____

Version 4.10.2

- U Result is less than the MDL
- B Result is between MDL and RL
- N Spike recovery failed
- NC Percent recovery was not calculated
- * Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: DHX40DT
 Original Sample ID: DHX40T Client ID: DF/S1/0228/SDC/026D
 Matrix: TCLP Units: mg/L Prep Date: 8/21/00 Prep Batch: 0234102
 Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	OS Conc	Q	MSD Conc	Q	Spike Level	% Rec	OS DF	MSD DF	Instr	OS Anal Date	OS Anal Time	MSD Anal Date	MSD Anal Time
Mercury	253.7	0.000097	B	0.0051		0.005	100.1	1	1	CVAA	8/21/00	10:56	8/21/00	11:00

Comments: _____

Version 4.10.2

U Result is less than the MDL
 B Result is between MDL and RL
 N Spike recovery failed
 NC Percent recovery was not calculated
 * Duplicate analysis RPD was not within limits

Form 5A Equivalent

669 827

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DHX40STOriginal Sample ID: DHX40TClient ID: DF/S1/0228/SDC/026SMatrix: TCLP Units: mg/LPrep Date: 8/21/00Prep Batch: 0234110Weight: NA Volume: 50Percent Moisture: NA

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Arsenic	193.7	0.12	B	5.2		5	101.9	1	1	ICP	8/22/00	8:28	8/22/00	8:35
Barium	493.4	0.98	B	47.4		50	92.7	1	1	ICP	8/22/00	8:28	8/22/00	8:35
Cadmium	228.8	0.0028	U	1.0		1	99.7	1	1	ICP	8/22/00	8:28	8/22/00	8:35
Chromium	267.7	0.0038	U	4.7		5	93.7	1	1	ICP	8/22/00	8:28	8/22/00	8:35
Lead	220.4	0.025	U	4.8		5	96.4	1	1	ICP	8/22/00	8:28	8/22/00	8:35
Selenium	196.0	0.067	U	1.1		1	105.5	1	1	ICP	8/22/00	8:28	8/22/00	8:35
Silver	328.1	0.0031	U	0.96		1	96.0	1	1	ICP	8/22/00	8:28	8/22/00	8:35

Comments: _____

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

Form SA Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: DHX40DT

Original Sample ID: DHX40T Client ID: DF/S1/0228/SDC/026D

Matrix: TCLP Units: mg/L Prep Date: 8/21/00 Prep Batch: 0234110

Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	OS Conc	Q	MSD Conc	Q	Spike Level	% Rec	OS DF	MSD DF	Instr	OS Anal Date	OS Anal Time	MSD Anal Date	MSD Anal Time
Arsenic	193.7	0.12	B	5.2		5	101.1	1	1	ICP	8/22/00	8:28	8/22/00	8:38
Barium	493.4	0.98	B	47.4		50	92.7	1	1	ICP	8/22/00	8:28	8/22/00	8:38
Cadmium	228.8	0.0028	U	1.0		1	99.6	1	1	ICP	8/22/00	8:28	8/22/00	8:38
Chromium	267.7	0.0038	U	4.7		5	93.4	1	1	ICP	8/22/00	8:28	8/22/00	8:38
Lead	220.4	0.025	U	4.8		5	95.0	1	1	ICP	8/22/00	8:28	8/22/00	8:38
Selenium	196.0	0.067	U	1.0		1	102.6	1	1	ICP	8/22/00	8:28	8/22/00	8:38
Silver	328.1	0.0031	U	0.96		1	95.6	1	1	ICP	8/22/00	8:28	8/22/00	8:38

Comments: _____

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

Form 5A Equivalent

669 829

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: DHX40DTMatrix Spike Sample ID: DHX40ST Client ID: DF/S1/0228/SDC/026DMatrix: TCLP Units: mg/L Prep Date: 8/21/00 Prep Batch: 0234102Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MS Conc	Q	MSD Conc	Q	RPD	MS DF	MSD DF	Instr	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Mercury	253.7	0.0053		0.0051		3.3 %	1	1	CVAA	8/21/00	10:58	8/21/00	11:00

Comments: _____

Version 4.10.2

U Result is less than the MDL

Form 6 Equivalent

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: DHX40DTMatrix Spike Sample ID: DHX40ST Client ID: DF/S1/0228/SDC/026DMatrix: TCLP Units: mg/L Prep Date: 8/21/00 Prep Batch: 0234110Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MS Conc	Q	MSD Conc	Q	RPD	MS DF	MSD DF	Instr	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Arsenic	193.696	5.2		5.2		0.8 %	1	1	ICP	8/22/00	8:35	8/22/00	8:38
Barium	493.409	47.4		47.4		0.0 %	1	1	ICP	8/22/00	8:35	8/22/00	8:38
Cadmium	228.802	1.0		1.0		0.0 %	1	1	ICP	8/22/00	8:35	8/22/00	8:38
Chromium	267.716	4.7		4.7		0.3 %	1	1	ICP	8/22/00	8:35	8/22/00	8:38
Lead	220.353	4.8		4.8		1.4 %	1	1	ICP	8/22/00	8:35	8/22/00	8:38
Selenium	196.026	1.1		1.0		2.7 %	1	1	ICP	8/22/00	8:35	8/22/00	8:38
Silver	328.068	0.96		0.96		0.5 %	1	1	ICP	8/22/00	8:35	8/22/00	8:38

Comments: _____

Version 4.10.2

U Result is less than the MDL

Form 6 Equivalent

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

669 831

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DJ5H9CTMatrix: TCLP Units: mg/L Prep Date: 8/21/00 Prep Batch: 0234102Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.0025	0.0027	108.0		80-120	1	CVAA	8/21/00	10:53

Comments: _____

Version 4.10 2

STL Pittsburgh

U Result is less than the MDL

B Result is between MDL and RL

Form 7 Equivalent

6030

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DJ5HPCTMatrix: TCLP Units: mg/L Prep Date: 8/21/00 Prep Batch: 0234110Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Arsenic	193.696	2.0	2.1	104.6		80-120	1	ICP	8/22/00	8:25
Barium	493.409	2.0	2.1	103.9	B	80-120	1	ICP	8/22/00	8:25
Cadmium	228.802	0.050	0.048	95.7	B	80-120	1	ICP	8/22/00	8:25
Chromium	267.716	0.20	0.21	106.3	B	80-120	1	ICP	8/22/00	8:25
Lead	220.353	0.50	0.51	101.6		80-120	1	ICP	8/22/00	8:25
Selenium	196.026	2.0	2.1	103.1		80-120	1	ICP	8/22/00	8:25
Silver	328.068	0.050	0.047	93.3	B	80-120	1	ICP	8/22/00	8:25

Comments: _____

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

Form 7 Equivalent

STL-Pittsburgh

669 833

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: DHX40PT

Original Sample ID: DHX40T Client ID: DF/S1/0228/SDC/026

Matrix: TCLP Units: mg/L Prep Date: 8/21/00 Prep Batch: 0234110

Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	OS Conc	Q	Serial Dilution Conc	Q	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Arsenic	193.696	0.12	B	0.15	U	5.1 %	1	5	ICP	8/22/00	8:28	8/22/00	8:32
Barium	493.409	0.98	B	1.0	B		1	5	ICP	8/22/00	8:28	8/22/00	8:32
Cadmium	228.802	0.0028	U	0.014	U		1	5	ICP	8/22/00	8:28	8/22/00	8:32
Chromium	267.716	0.0038	U	0.019	U		1	5	ICP	8/22/00	8:28	8/22/00	8:32
Lead	220.353	0.025	U	0.12	U		1	5	ICP	8/22/00	8:28	8/22/00	8:32
Selenium	196.026	0.067	U	0.34	U		1	5	ICP	8/22/00	8:28	8/22/00	8:32
Silver	328.068	0.0031	U	0.016	U		1	5	ICP	8/22/00	8:28	8/22/00	8:32

Comments: _____

Version 4.10.2

U Result is less than the MDL

Form 9 Equivalent

B Result is between MDL and RL

E Serial dilution percent difference not within limits

STL-Pittsburgh

Metals Data Reporting Form

Instrument Detection Limits

Instrument: CVAAUnits: ppb

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Mercury	253.70	0.2	0.045	3/20/00

669 835

STL-Pittsburgh

Metals Data Reporting Form

Instrument Detection Limits

Instrument: ICPUnits: ppb

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Arsenic	193.70	500	30.3	4/1/00
Barium	493.41	10000	0.41	4/1/00
Cadmium	228.80	100	2.8	4/1/00
Chromium	267.72	500	3.8	4/1/00
Lead	220.35	500	24.6	4/1/00
Selenium	196.03	250	67.4	4/1/00
Silver	328.07	500	3.1	4/1/00

STL-Pittsburgh

Metals Data Reporting Form

Inter-Element Correction Factors

Instrument: ICPDate of IEC's: 6/22/00

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	As(0.008043), Mn(0.00002), Pb(0.000607)
Antimony	206.838	Ni(-0.000449), Pb(-0.001338), Sn(-0.004668)
Arsenic	193.696	Cd(0.011196)
Barium	493.409	Co(0.000506)
Beryllium	313.042	Cd(0.008625)
Cadmium	228.802	Co(0.002633)
Chromium	267.716	Pb(-0.000686), Sb(0.008213), V(-0.001979)
Cobalt	228.616	Al(-0.014067), B(0.00201), Cd(-0.004523), Cu(-0.00091), Pb(-0.027395), Sb(-0.003935), Tl(0.007862)
Copper	324.754	Zn(0.00466)
Iron	259.94	Ag(-0.000239), As(0.001198), B(-0.001921), Cd(-0.000034), Cu(-0.00008), Mn(-0.000288), Mo(-0.00015), Pb(0.000239), Se(-0.002635), Sn(-0.00019), Tl(0.010326), Zn(0.000098)
Manganese	257.61	Ag(0.000201), Tl(-0.005634)
Molybdenum	202.03	Al(0.008699), Cr(-0.000292), Mn(-0.00033), Sb(0.005808), V(-0.019318)
Nickel	231.604	Cd(-0.000409), Sb(-0.009092), Zn(0.003263)
Tin	189.989	Sb(0.002262)
Titanium	334.941	Co(0.001637), Fe(-0.003475), Sb(0.001696), Sn(0.003624)
Vanadium	292.402	Ag(-0.005069), Al(0.012877), As(0.017242), Be(0.00265), Cd(0.000094), Cr(0.000568), Sb(-0.003793), Si(-0.012762), Tl(0.007148), Zn(-0.004494)

C69 837

STL-Pittsburgh

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: CVAA

Units: ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Mercury	253.70	10	1/15/00

Metals Data Reporting Form

Linear Dynamic RangesInstrument: ICPUnits: ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Arsenic	193.70	100000	4/5/00
Barium	493.41	100000	4/5/00
Cadmium	228.80	100000	4/5/00
Chromium	267.72	100000	4/5/00
Lead	220.35	100000	4/5/00
Selenium	196.03	100000	4/5/00
Silver	328.07	2000	4/5/00

STL-Pittsburgh

669 839

Metals Data Reporting Form

Preparation Log

Preparation Batch: 0234102 Instrument: CVAA Matrix: TCLP

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DJ3ACBT	8/21/00	NA	100	NA
DJ5H9BT	8/21/00	NA	100	NA
DJ5H9CT	8/21/00	NA	100	NA
DHX40DT	8/21/00	NA	100	NA
DHX40ST	8/21/00	NA	100	NA
DHX40T	8/21/00	NA	100	NA
DHX47T	8/21/00	NA	100	NA
DHX4AT	8/21/00	NA	100	NA

STL-Pittsburgh
Metals Data Reporting Form

669 840

Preparation Log

Preparation Batch: 0234110 **Instrument:** ICP **Matrix:** TCLP

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DJ3ACBT	8/21/00	NA	50	NA
DJ5HPBT	8/21/00	NA	50	NA
DJ5HPCT	8/21/00	NA	50	NA
DHX40DT	8/21/00	NA	50	NA
DHX40ST	8/21/00	NA	50	NA
DHX40T	8/21/00	NA	50	NA
DHX47T	8/21/00	NA	50	NA
DHX4AT	8/21/00	NA	50	NA

STL-Pittsburgh

669 841

Metals Data Reporting Form

Instrument Runlog

Instrument: CVAA

Chart Number: 0821HGA.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
Std1Rep1		8/21/00	9:46
Std2Rep1		8/21/00	9:48
Std3Rep1		8/21/00	9:50
Std4Rep1		8/21/00	9:51
Std5Rep1		8/21/00	9:53
Std6Rep1		8/21/00	9:54
ICV5-1		8/21/00	9:57
ICB1		8/21/00	9:59
CCV5-1		8/21/00	10:01
CCB1		8/21/00	10:02
ZZZZZZ		8/21/00	10:05
ZZZZZZ		8/21/00	10:06
ZZZZZZ		8/21/00	10:08
ZZZZZZ		8/21/00	10:10
ZZZZZZ		8/21/00	10:11
ZZZZZZ		8/21/00	10:14
ZZZZZZ		8/21/00	10:15
ZZZZZZ		8/21/00	10:17
ZZZZZZ		8/21/00	10:18
ZZZZZZ		8/21/00	10:20
CCV5-2		8/21/00	10:22
CCB2		8/21/00	10:23
ZZZZZZ		8/21/00	10:25
ZZZZZZ		8/21/00	10:26
ZZZZZZ		8/21/00	10:28
ZZZZZZ		8/21/00	10:29
ZZZZZZ		8/21/00	10:31
ZZZZZZ		8/21/00	10:33
ZZZZZZ		8/21/00	10:34
ZZZZZZ		8/21/00	10:36
ZZZZZZ		8/21/00	10:37
ZZZZZZ		8/21/00	10:39
CCV5-3		8/21/00	10:41
CCB3		8/21/00	10:42
ZZZZZZ		8/21/00	10:44
ZZZZZZ		8/21/00	10:46
ZZZZZZ		8/21/00	10:48
ZZZZZZ		8/21/00	10:49
DJSH9BT		8/21/00	10:51

Metals Data Reporting Form

Instrument Runlog

Instrument: CVAAChart Number: 0821HGA.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
DJ5H9CT		8/21/00	10:53
DJ3ACBT		8/21/00	10:54
DHX40T	DF/S1/0228/SDC/026	8/21/00	10:56
DHX40ST	DF/S1/0228/SDC/026S	8/21/00	10:58
DHX40DT	DF/S1/0228/SDC/026D	8/21/00	11:00
CCV5-4		8/21/00	11:01
CCB4		8/21/00	11:03
DHX47T	DF/S1/0228/SDC/027	8/21/00	11:05
DHX4AT	DF/S1/0228/SDC/028	8/21/00	11:06
ZZZZZZ		8/21/00	11:08
ZZZZZZ		8/21/00	11:10
ZZZZZZ		8/21/00	11:12
ZZZZZZ		8/21/00	11:13
ZZZZZZ		8/21/00	11:15
ZZZZZZ		8/21/00	11:17
ZZZZZZ		8/21/00	11:18
ZZZZZZ		8/21/00	11:20
CCV5-5		8/21/00	11:23
CCB5		8/21/00	11:25

669 843

STL-Pittsburgh
Metals Data Reporting Form

Instrument Runlog

Instrument: ICPChart Number: J00822A.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		8/22/00	7:40
ZZZZZZ		8/22/00	7:43
ZZZZZZ		8/22/00	7:46
ZZZZZZ		8/22/00	7:49
STD1		8/22/00	7:55
STD5A		8/22/00	7:58
STD5B		8/22/00	8:01
ICV2-1		8/22/00	8:04
ICB1		8/22/00	8:07
ICSA		8/22/00	8:10
ICSAB		8/22/00	8:14
DJ5HPBT		8/22/00	8:19
DJ3ACBT		8/22/00	8:22
DJ5HPCT		8/22/00	8:25
DHX40T	DF/S1/0228/SDC/026	8/22/00	8:28
DHX40PT	DF/S1/0228/SDC/026	8/22/00	8:32
DHX40ST	DF/S1/0228/SDC/026S	8/22/00	8:35
DHX40DT	DF/S1/0228/SDC/026D	8/22/00	8:38
DHX47T	DF/S1/0228/SDC/027	8/22/00	8:41
CCV2-1		8/22/00	8:44
CCB1		8/22/00	8:47
DHX4AT	DF/S1/0228/SDC/028	8/22/00	8:51
ZZZZZZ		8/22/00	8:54
ZZZZZZ		8/22/00	8:57
ZZZZZZ		8/22/00	9:00
ZZZZZZ		8/22/00	9:03
CCV2-2		8/22/00	9:06
CCB2		8/22/00	9:09
ZZZZZZ		8/22/00	9:13
ZZZZZZ		8/22/00	9:16
ZZZZZZ		8/22/00	9:19
ZZZZZZ		8/22/00	9:22
ZZZZZZ		8/22/00	9:26
ZZZZZZ		8/22/00	9:29
ZZZZZZ		8/22/00	9:45
ZZZZZZ		8/22/00	9:48
ZZZZZZ		8/22/00	9:51
ZZZZZZ		8/22/00	9:55
ZZZZZZ		8/22/00	9:58

STL-Pittsburgh
Metals Data Reporting Form

669 844

Instrument Runlog

Instrument: ICP

Chart Number: J00822A.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		8/22/00	10:01
ZZZZZZ		8/22/00	10:04
ZZZZZZ		8/22/00	10:07
ZZZZZZ		8/22/00	10:10
ZZZZZZ		8/22/00	10:13
ZZZZZZ		8/22/00	10:17
ZZZZZZ		8/22/00	10:20
ZZZZZZ		8/22/00	10:23
ZZZZZZ		8/22/00	10:26
ZZZZZZ		8/22/00	10:29
ZZZZZZ		8/22/00	10:32
ZZZZZZ		8/22/00	10:35
ZZZZZZ		8/22/00	10:39
ZZZZZZ		8/22/00	10:42
ZZZZZZ		8/22/00	10:45
ZZZZZZ		8/22/00	10:48
ZZZZZZ		8/22/00	10:51
ZZZZZZ		8/22/00	10:54
ZZZZZZ		8/22/00	10:57
ZZZZZZ		8/22/00	11:01
ZZZZZZ		8/22/00	11:04
ZZZZZZ		8/22/00	11:07
ZZZZZZ		8/22/00	11:10
ZZZZZZ		8/22/00	11:13
ZZZZZZ		8/22/00	11:16
ZZZZZZ		8/22/00	11:19
ZZZZZZ		8/22/00	11:23
ZZZZZZ		8/22/00	11:26
ZZZZZZ		8/22/00	11:29
ZZZZZZ		8/22/00	11:32
ZZZZZZ		8/22/00	11:35
ZZZZZZ		8/22/00	11:38
ZZZZZZ		8/22/00	11:41
ZZZZZZ		8/22/00	11:44
ZZZZZZ		8/22/00	11:48
ZZZZZZ		8/22/00	11:51
ZZZZZZ		8/22/00	11:54
ZZZZZZ		8/22/00	11:57
ZZZZZZ		8/22/00	12:00

STL-Pittsburgh

669 845

Metals Data Reporting Form

Instrument Runlog

Instrument: ICP

Chart Number: J00822A.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		8/22/00	12:03
ZZZZZZ		8/22/00	12:07
ZZZZZZ		8/22/00	12:10
ZZZZZZ		8/22/00	12:13
ZZZZZZ		8/22/00	12:16
ZZZZZZ		8/22/00	12:19
ZZZZZZ		8/22/00	12:22
ZZZZZZ		8/22/00	12:25
ZZZZZZ		8/22/00	12:28
ZZZZZZ		8/22/00	12:32
ZZZZZZ		8/22/00	12:35
ZZZZZZ		8/22/00	12:38
ZZZZZZ		8/22/00	12:41
ZZZZZZ		8/22/00	12:44
ZZZZZZ		8/22/00	12:47
ZZZZZZ		8/22/00	12:50
ZZZZZZ		8/22/00	12:54
ZZZZZZ		8/22/00	12:57
ZZZZZZ		8/22/00	13:06
ZZZZZZ		8/22/00	13:09
ZZZZZZ		8/22/00	13:12
ZZZZZZ		8/22/00	13:15
ZZZZZZ		8/22/00	13:18
ZZZZZZ		8/22/00	13:21
ZZZZZZ		8/22/00	13:25
ZZZZZZ		8/22/00	13:28
ZZZZZZ		8/22/00	13:31
ZZZZZZ		8/22/00	13:34
ZZZZZZ		8/22/00	13:37
ZZZZZZ		8/22/00	13:41
ZZZZZZ		8/22/00	13:44
ZZZZZZ		8/22/00	13:47
ZZZZZZ		8/22/00	13:50
ZZZZZZ		8/22/00	13:53
ZZZZZZ		8/22/00	13:57
ZZZZZZ		8/22/00	14:00
ZZZZZZ		8/22/00	14:03
ZZZZZZ		8/22/00	14:06
ZZZZZZ		8/22/00	14:09

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPChart Number: J00822A.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		8/22/00	14:12
ZZZZZZ		8/22/00	14:16
ZZZZZZ		8/22/00	14:19
ZZZZZZ		8/22/00	14:22
ZZZZZZ		8/22/00	14:25
ZZZZZZ		8/22/00	14:36
ZZZZZZ		8/22/00	14:39
ZZZZZZ		8/22/00	14:42
ZZZZZZ		8/22/00	14:45
ZZZZZZ		8/22/00	14:48
ZZZZZZ		8/22/00	14:52
ZZZZZZ		8/22/00	14:55
ZZZZZZ		8/22/00	14:58
ZZZZZZ		8/22/00	15:01
ZZZZZZ		8/22/00	15:04
ZZZZZZ		8/22/00	15:07
ZZZZZZ		8/22/00	15:10
ZZZZZZ		8/22/00	15:14
ZZZZZZ		8/22/00	15:19
ZZZZZZ		8/22/00	15:22
ZZZZZZ		8/22/00	15:25
ZZZZZZ		8/22/00	15:31
ZZZZZZ		8/22/00	15:35
ZZZZZZ		8/22/00	15:38
ZZZZZZ		8/22/00	15:41
ZZZZZZ		8/22/00	15:44
ZZZZZZ		8/22/00	15:47
ZZZZZZ		8/22/00	15:51

669 847

**TCLP
METALS
RAW DATA**

Michael T. Wozniak 8-23-00

#	Sample Name	AG	AS	BA	CD	CR	PB
1	STD1	-.0008	.00034	0	-.00002	-.00035	.00044
2	STD5A	.27254	.52749	3.97987	.91879	3.76179	.2563
3	STD5B						
4	ICV2-1 0057-005-2	.50939	1.0034	1.0063	1.0198	1.0215	1.0153
5	ICB1	-.00035	-.00189	.00005	-.00010	.00385	-.00373
6	ICSA 0057-011-1	-.00042	-.18484	.00150	-.00218	.00186	.08054
7	ICSAB 0014-187-1	.94840	.87439	.46767	.95603	.44641	.98554
8	DJ5HPBT	-.00177	-.01545	.00025	-.00060	.00265	.00950
9	DJ3ACBT	.00144	.15798	.00201	-.00065	.00345	-.01514
10	DJ5HPCT	.04665	2.0913	2.0786	.04786	.21267	.50790
11	DHX40T	-.00064	.11993	.97933	.00097	.00345	.00728
12	DHX40P5T	.00073	.01276	.20593	-.00105	.00186	-.01715
13	DHX40ST	.96049	5.2127	47.352	.99671	4.6829	4.8208
14	DHX40DT	.95583	5.1745	47.353	.99635	4.6703	4.7525
15	DHX47T	-.00217	.13204	1.0341	-.00100	.00292	.01419
16	CCV2-1 0057-025-5	1.0015	5.0612	4.9300	5.1059	5.0067	5.0595
17	CCB1	.00072	.01827	.00062	.00044	.00185	.00188
18	DHX4AT	-.00129	.14565	.94660	.00004	.00584	.16265
19	DJ0QLT	-.00182	.18491	2.3461	.07006	.04001	16.830
20	DHWJHBT	-.00070	.01151	.00000	-.00003	.00279	-.02279
21	DHV0KBT	.00108	.14161	.00055	-.00223	.00212	.01138
22	DHWJHCT	.04832	2.2662	2.0222	.04403	.20139	.47697
23	CCV2-2	1.0087	5.1946	5.0164	5.1324	5.0561	5.0815
24	CCB2	.00071	-.01841	.00017	.00316	.00305	.00572
25	DHKQ4T	-.00166	.42034	.82329	-.00214	.00052	.01708
26	DHKQ4P5T	-.00139	.10969	.16876	-.00010	-.00066	.00954
27	DHKQ4ST	.90486	5.3692	38.658	.95256	4.5387	3.8309
28	DHKQ4DT	.92557	5.4608	48.932	.96404	4.6192	4.7186
29	CCV2-3	1.0051	5.0901	4.9928	5.1411	5.0479	5.0797
30	CCB3	-.00035	.02125	.00005	.00173	.00053	-.00190
31	DJ32CBE	.00214	-.01262	-.00002	.00124	.00372	-.01514
32	DJ32CCE	.04585	1.9851	1.9868	.04596	.19995	.50994
33	DHXN9E	-.00005	-.00745	.07114	.00185	.00265	-.01633
34	DHXN9P5E	.00007	-.03575	.01417	.00072	.00212	.00164
35	DHXN9SE	.04363	1.9723	2.0342	.04794	.19981	.49338
36	DHXN9DE	.04433	1.9588	2.0197	.04659	.19955	.49145
37	DHXNDE	-.00044	.01284	.07639	-.00016	.00251	-.01590
38	DHXNFE	.00062	-.01276	.09717	.00036	.00464	-.01399
39	CCV2-4	1.0025	5.1255	5.0056	5.1695	5.0344	5.0832
40	CCB4	.00142	-.00205	.00037	.00067	.00319	-.01134
41	DHV6DB	.00072	-.00399	.00005	.00215	.00225	-.00568
42	DHV6DC	.04725	1.9525	1.9791	.04809	.19966	.50727
43	DHM8P	.00000	-.01965	.06518	-.00039	.00199	.04407
44	DHM8V	.00187	-.04867	.03666	.00251	.01129	.16026
45	DHM8X	.00040	-.01142	.11204	-.00063	.01249	.01074
46	DHM91	.00076	-.01772	.03721	-.00086	.00664	-.00188
47	DHM94	-.00018	-.00676	.04030	.00067	.00677	.00053
48	DHM94P5	-.00066	-.01548	.00854	.00121	.00332	.00885
49	DHM94S	.04674	1.9715	2.0115	.04725	.20378	.53816
50	DHM94D	.04618	1.9871	1.9741	.04660	.20073	.51543
51	CCV2-5	1.0056	5.0612	5.0089	5.2243	5.0615	5.1313
52	CCB5	.00215	-.01079	.00030	.00243	.00252	-.01319
53	DHM99	-.00032	-.02128	.07508	.00174	.02112	.00849

#	Sample Name	AG	AS	BA	CD	CR	PB
54	DHM9C	-.00022	.00166	.03910	.00144	.00359	-.00299
55	DHM9D	.00102	-.00651	.03882	.00283	.00318	.00661
56	DHM9E	.00107	-.02379	.01171	.00090	.00252	.01314
57	DHP5X	-.00057	-.03318	.01399	.00200	.00159	-.00980
58	DHP61	.00023	-.01301	.01503	.00084	.00133	-.00287
59	DHP63	-.00013	-.01128	.05105	.00086	.00358	.00860
60	DHP65	.00106	-.00469	.05399	.00108	.00226	.01663
61	DHP69	.00079	-.00576	.03357	.00192	.00199	.00936
62	DHP6D	.00042	-.02806	.03314	.00019	.00199	.01321
63	CCV2-6	1.0137	5.2228	5.0133	5.2877	5.1109	5.1518
64	CCB6	.00179	-.00303	.00055	.00091	.00332	-.00373
65	DHP6H	.00010	-.02493	.03319	.00369	.00199	.00355
66	DHP6L	.00038	-.01098	.01020	-.00097	.00132	-.01351
67	CCV2-7	1.0076	5.2067	5.0372	5.2828	5.1008	5.1079
68	CCB7	.00107	-.01844	.00025	.00176	.00172	-.00186
69	DHV64BF	.00035	-.00103	-.00014	-.00031	.00172	-.02843
70	DHV64CF	.05094	2.0730	2.0198	.04959	.21267	.53303
71	DHM8PF	.00003	-.02644	.05867	.00059	.00106	.01889
72	DHM8VF	.00001	-.01759	.03206	.00176	.00106	-.00568
73	DHM8XE	-.00123	-.01670	.05824	.00209	.00212	.00508
74	DHM91F	.00002	.00551	.02917	.00024	.00159	.01142
75	DHM94F	.00035	-.02145	.03086	-.00095	.00159	.00954
76	DHM94P5F	.00071	-.00101	.00586	-.00044	.00172	-.02466
77	DHM94SF	.04876	2.0021	2.0576	.04382	.20377	.52658
78	DHM94DF	.04875	2.0242	2.0603	.04812	.20364	.52282
79	CCV2-8	1.0095	5.2399	5.0584	5.2827	5.1072	5.1138
80	CCB8	.00001	.01723	.00050	.00188	.00199	-.00187
81	DHM99F	.00000	.01047	.02985	-.00076	.00106	-.02465
82	DHM9CF	.00000	-.00980	.03646	-.00063	.00172	-.00759
83	DHM9DF	.00001	-.05524	.03576	.00201	.00225	-.00186
84	DHM9EF	.00144	-.00334	.12572	-.00198	.00265	-.00382
85	DHP5XF	.00076	-.02275	.00929	.00191	.00185	.00382
86	DHP61F	.00070	-.00789	.00970	-.00027	.00066	.00945
87	DHP63F	-.00056	-.00189	.04530	-.00203	.00079	-.00961
88	DHP65F	.00001	-.01754	.05304	.00107	.00199	.00003
89	DHP69F	-.00033	.00560	.03301	.00279	-.00026	-.00571
90	DHP6DF	-.00068	.00456	.03332	-.00014	.00185	.00189
91	CCV2-9	1.0128	5.2208	5.0362	5.3334	5.1416	5.1150
92	CCB9	.00036	-.01943	.00030	.00228	.00252	-.02277
93	DHP6HF	-.00035	-.00691	.03108	.00095	.00199	-.00756
94	DHP6LF	.00003	-.01062	.01040	.00284	.00199	-.00967
95	DHM9E RAW	.00107	-.00459	.01198	.00005	.00292	-.01139
96	DHM9EF RAW	.00036	.10389	.12785	-.00116	.00239	.01329
97	CCV2-10	.99686	5.1666	4.9971	5.2505	5.0565	5.0125
98	CCB10	.00035	-.01843	.00010	.00052	.00146	.01515
99	DHP2EB	.00035	.01720	.00012	.00156	.00252	-.00755
100	DHP2EC	.04725	1.9718	1.9723	.04740	.20208	.48693
101	DHMJE	.00078	.07273	.03307	.00128	.00753	-.00428
102	DHMJEP5	.00100	-.00294	.00693	.00012	.00889	.03966
103	DHMJES	.04800	2.0936	1.9520	.04641	.20192	.51312
104	DHMJED	.04656	2.0851	1.9521	.04402	.20006	.53007
105	DHMJT	-.00161	.05093	.05701	.00101	.01837	-.01246
106	DHMK5	-.00051	.06251	.01105	-.00256	.00481	.02402
107	DHMK9	.00091	.05858	.01060	-.00071	.00454	.00894

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#	Sample Name	AG	AS	BA	CD	CR	PB
108	DHMKE	-.00064	.07124	.56852	.00000	.09777	.17719
109	CCV2-11	1.0128	5.2210	5.0783	5.3479	5.1486	5.1299
110	CCB11	.00143	-.02139	.00028	.00209	.00305	-.00374
111	DHMJEF	-.00026	.04785	.00256	.00121	.00476	.00002
112	DHMJEP5F	.00216	.01282	.00062	-.00014	.00610	-.01704
113	DHMJESF	.04620	2.0664	1.9039	.04212	.19741	.50592
114	DHMJEDF	.04662	2.1064	1.9441	.04101	.20153	.49095
115	DHMJTF	.00036	.04186	.00073	.00173	.00509	.02289
116	DHMK5F	-.00009	.04055	.00535	-.00057	.00680	.03785
117	DHMK9F	-.00047	.05140	.00389	-.00238	.00560	-.00575
118	DHMKEF	-.00004	.00367	.01146	-.00102	.00890	-.00065
119	DHMJE/2 NA	.00162	.00293	.01698	-.00136	.00489	.01298
120	DHMJEP10 NA	-.00002	-.00686	.00344	-.00002	.00079	-.02667
121	CCV2-12	1.0132	5.2679	5.1151	5.3420	5.1493	5.1417
122	CCB12	.00070	-.00880	.00025	.00029	.00252	.00951
123	DHMJES/2 NA	.02439	1.0663	1.0016	.02330	.10501	.26813
124	DHJED/2 NA	.02547	1.1038	1.0075	.02169	.10527	.25866
125	DHMJT/2 NA	-.00009	.00867	.02932	-.00033	.00905	-.00441
126	DHMKE/2 CA,NA	-.00077	.06330	.29623	.00003	.05367	.08115
127	DHMJEF/2 NA	-.00029	.00737	.00130	.00144	.00477	-.01135
128	DHMJEP10F NA	.00215	-.00143	.00048	.00275	.00252	.02663
129	DHMJESF/2 NA	.02420	1.0454	.98835	.02211	.10449	.26642
130	DHMJEDF/2 NA	.02531	1.0412	1.0007	.02144	.10581	.29126
131	DHMJTF/2 NA	-.00055	.01895	.00025	.00064	.00427	-.00566
132	DHMKEF/2 NA	-.00018	.02442	.00597	-.00004	.00584	.02815
133	CCV2-13	1.0179	5.3003	5.1287	5.3572	5.1586	5.1379
134	CCB13	.00144	-.00414	.00030	.00125	.00279	.02279
135	DHMJE(RAW) ZN	-.00066	.33843	.03520	-.00246	.00633	-.01197
136	DHMJEF(RAW) ZN	.00082	.43648	.00263	-.00459	.00595	-.00943
137	DHMK5(RAW) ZN	.00043	1.0695	.01005	L-.01144	.00839	.00911
138	DHMK5F(RAW) ZN	-.00117	1.0018	.00402	L-.00926	.00640	.02840
139	DHMJKE(RAW) CA	-.00079	1.3995	.33857	L-.01810	.03825	.08734
140	CCV2-14	.98956	5.2084	5.0688	5.1792	5.0095	4.9735
141	CCB14	.00107	-.00979	.00019	.00032	.00159	.00188

#	Sample Name	SE
1	STD1	.00025
2	STD5A	.51074
3	STD5B	
4	ICV2-1 0057-005-2	1.0083
5	ICB1	-.00293
6	ICSA 0057-011-1	.02845
7	ICSAB 0014-187-1	.97011
8	DJ5HPBT	-.01460
9	DJ3ACBT	-.02245
10	DJ5HPCT	2.0627
11	DHX40T	-.01005
12	DHX40P5T	-.02140
13	DHX40ST	1.0545
14	DHX40DT	1.0260
15	DHX47T	-.01513
16	CCV2-1 0057-025-5	5.1847

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#	Sample Name	SE
17	CCB1	.00294
18	DHX4AT	-.01216
19	DJ0QLT	-.02750
20	DHWJHBT	.00105
21	DHV0KBT	-.03522
22	DHWJHCT	2.2477
23	CCV2-2	5.2774
24	CCB2	.00587
25	DHKQ4T	-.00385
26	DHKQ4P5T	-.03896
27	DHKQ4ST	.97153
28	DHKQ4DT	1.0970
29	CCV2-3	5.1597
30	CCB3	.01371
31	DJ32CBE	-.03524
32	DJ32CCE	1.9842
33	DHYN9E	-.00192
34	DHYN9P5E	.01175
35	DHYN9SE	2.0135
36	DHYN9DE	1.9871
37	DHYNDE	.03235
38	DHYNFE	.01085
39	CCV2-4	5.1329
40	CCB4	-.05386
41	DHV6DB	-.01958
42	DHV6DC	1.9773
43	DHM8P	-.00732
44	DHM8V	-.00109
45	DHM8X	-.02522
46	DHM91	-.01727
47	DHM94	-.00814
48	DHM94P5	-.02881
49	DHM94S	2.0149
50	DHM94D	1.9702
51	CCV2-5	5.1276
52	CCB5	-.02252
53	DHM99	.00238
54	DHM9C	.00265
55	DHM9D	-.00245
56	DHM9E	-.01367
57	DHP5X	.00617
58	DHP61	.00186
59	DHP63	.00217
60	DHP65	.02055
61	DHP69	-.01009
62	DHP6D	.01524
63	CCV2-6	5.1814
64	CCB6	-.00096
65	DHP6H	.00094
66	DHP6L	-.02530
67	CCV2-7	5.1598
68	CCB7	.00587
69	DHV64BF	.01469
70	DHV64CF	2.0872

#	Sample Name	SE
71	DHM8PF	.00256
72	DHM8VF	-.01352
73	DHM8XE	-.02947
74	DHM91F	.00321
75	DHM94F	.02157
76	DHM94P5F	-.00881
77	DHM94SF	2.0420
78	DHM94DF	2.0136
79	CCV2-8	5.1082
80	CCB8	-.01272
81	DHM99F	.00100
82	DHM9CF	-.01267
83	DHM9DF	.01279
84	DHM9EF	-.00972
85	DHP5XF	-.00879
86	DHP61F	-.02151
87	DHP63F	-.00803
88	DHP65F	-.01368
89	DHP69F	-.01955
90	DHP6DF	-.00778
91	CCV2-9	5.1132
92	CCB9	-.01469
93	DHP6HF	-.05580
94	DHP6LF	-.01263
95	DHM9E RAW	-.01858
96	DHM9EF RAW	-.00686
97	CCV2-10	5.0269
98	CCB10	-.03917
99	DHP2EB	-.00292
100	DHP2EC	1.9724
101	DHMJE	.00816
102	DHMJEP5	-.01931
103	DHMJES	2.0432
104	DHMJED	2.0471
105	DHMJT	-.00259
106	DHMK5	.01319
107	DHMK9	-.00252
108	DHMKE	-.14123
109	CCV2-11	5.1591
110	CCB11	.01078
111	DHMJEF	-.00972
112	DHMJEP5F	.01470
113	DHMJESF	1.9958
114	DHMJEDF	2.0360
115	DHMJTf	-.00283
116	DHMK5F	.01235
117	DHMK9F	-.02185
118	DHMKEF	-.02389
119	DHMJE/2 NA	-.00226
120	DHMJEP10 NA	-.00964
121	CCV2-12	5.0974
122	CCB12	.01273
123	DHMJES/2 NA	1.0256
124	DHJED/2 NA	1.0246

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#	Sample Name	SE
125	DHMJT/2 NA	.00194
126	DHMKE/2 CA,NA	-.09534
127	DHMJEF/2 NA	-.02444
128	DHMJEP10F NA	-.00979
129	DHMJESF/2 NA	.99061
130	DHMJEDF/2 NA	1.0661
131	DHMJTTF/2 NA	-.00190
132	DHMKEF/2 NA	.01255
133	CCV2-13	5.0172
134	CCB13	-.01370
135	DHMJE(RAW) ZN	-.00533
136	DHMJEF(RAW) ZN	.00002
137	DHMK5(RAW) ZN	-.02449
138	DHMK5F(RAW) ZN	-.03771
139	DHMJKE(RAW) CA	-.08538
140	CCV2-14	5.1595
141	CCB14	.00097

MTW 8-23-00

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1	J00822A	QUANMET	08/22/00	07:55		X	IR
2	STD5A	J00822A	QUANMET	08/22/00	07:58		X	IR
3	STD5B	J00822A	QUANMET	08/22/00	08:01		X	IR
4	ICV2-1 0057-005-2	J00822A	QUANMET	08/22/00	08:04	MTW	S	CONC
5	ICB1	J00822A	QUANMET	08/22/00	08:07	MTW	S	CONC
6	ICSA 0057-011-1	J00822A	QUANMET	08/22/00	08:10	MTW	Q	CONC
7	ICSAB 0014-187-1	J00822A	QUANMET	08/22/00	08:14	MTW	Q	CONC
8	DJ5HPBT	J00822A	QUANMET	08/22/00	08:19	MTW	S	CONC
9	DJ3ACBT	J00822A	QUANMET	08/22/00	08:22	MTW	S	CONC
10	DJ5HPCT	J00822A	QUANMET	08/22/00	08:25	MTW	S	CONC
11	DHX40T	J00822A	QUANMET	08/22/00	08:28	MTW	S	CONC
12	DHX40P5T	J00822A	QUANMET	08/22/00	08:32	MTW	S	CONC
13	DHX40ST	J00822A	QUANMET	08/22/00	08:35	MTW	S	CONC
14	DHX40DT	J00822A	QUANMET	08/22/00	08:38	MTW	S	CONC
15	DHX47T	J00822A	QUANMET	08/22/00	08:41	MTW	S	CONC
16	CCV2-1 0057-025-5	J00822A	QUANMET	08/22/00	08:44	MTW	S	CONC
17	CCB1	J00822A	QUANMET	08/22/00	08:47	MTW	S	CONC
18	DHX4AT	J00822A	QUANMET	08/22/00	08:51	MTW	S	CONC
19	DJ0QLT	J00822A	QUANMET	08/22/00	08:54	MTW	S	CONC
20	DHWJHBT	J00822A	QUANMET	08/22/00	08:57	MTW	S	CONC
21	DHV0KBT	J00822A	QUANMET	08/22/00	09:00	MTW	S	CONC
22	DHWJHCT	J00822A	QUANMET	08/22/00	09:03	MTW	S	CONC
23	CCV2-2	J00822A	QUANMET	08/22/00	09:06	MTW	S	CONC
24	CCB2	J00822A	QUANMET	08/22/00	09:09	MTW	S	CONC
25	DHKQ4T	J00822A	QUANMET	08/22/00	09:13	MTW	S	CONC
26	DHKQ4P5T	J00822A	QUANMET	08/22/00	09:16	MTW	S	CONC
27	DHKQ4ST	J00822A	QUANMET	08/22/00	09:19	MTW	S	CONC
28	DHKQ4DT	J00822A	QUANMET	08/22/00	09:22	MTW	S	CONC
29	CCV2-3	J00822A	QUANMET	08/22/00	09:26	MTW	S	CONC
30	CCB3	J00822A	QUANMET	08/22/00	09:29	MTW	S	CONC
31	DJ32CBE	J00822A	QUANMET	08/22/00	09:45	MTW	S	CONC
32	DJ32CCE	J00822A	QUANMET	08/22/00	09:48	MTW	S	CONC
33	DHXN9E	J00822A	QUANMET	08/22/00	09:51	MTW	S	CONC
34	DHXN9P5E	J00822A	QUANMET	08/22/00	09:55	MTW	S	CONC
35	DHXN9SE	J00822A	QUANMET	08/22/00	09:58	MTW	S	CONC
36	DHXN9DE	J00822A	QUANMET	08/22/00	10:01	MTW	S	CONC
37	DHXNDE	J00822A	QUANMET	08/22/00	10:04	MTW	S	CONC
38	DHXNFE	J00822A	QUANMET	08/22/00	10:07	MTW	S	CONC
39	CCV2-4	J00822A	QUANMET	08/22/00	10:10	MTW	S	CONC
40	CCB4	J00822A	QUANMET	08/22/00	10:13	MTW	S	CONC
41	DHV6DB	J00822A	QUANMET	08/22/00	10:17	MTW	S	CONC
42	DHV6DC	J00822A	QUANMET	08/22/00	10:20	MTW	S	CONC
43	DHM8P	J00822A	QUANMET	08/22/00	10:23	MTW	S	CONC
44	DHM8V	J00822A	QUANMET	08/22/00	10:26	MTW	S	CONC
45	DHM8X	J00822A	QUANMET	08/22/00	10:29	MTW	S	CONC
46	DHM91	J00822A	QUANMET	08/22/00	10:32	MTW	S	CONC
47	DHM94	J00822A	QUANMET	08/22/00	10:35	MTW	S	CONC
48	DHM94P5	J00822A	QUANMET	08/22/00	10:39	MTW	S	CONC
49	DHM94S	J00822A	QUANMET	08/22/00	10:42	MTW	S	CONC
50	DHM94D	J00822A	QUANMET	08/22/00	10:45	MTW	S	CONC
51	CCV2-5	J00822A	QUANMET	08/22/00	10:48	MTW	S	CONC
52	CCB5	J00822A	QUANMET	08/22/00	10:51	MTW	S	CONC
53	DHM99	J00822A	QUANMET	08/22/00	10:54	MTW	S	CONC

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	DHM9C	J00822A	QUANMET	08/22/00	10:57	MTW	S	CONC
55	DHM9D	J00822A	QUANMET	08/22/00	11:01	MTW	S	CONC
56	DHM9E	J00822A	QUANMET	08/22/00	11:04	MTW	S	CONC
57	DHP5X	J00822A	QUANMET	08/22/00	11:07	MTW	S	CONC
58	DHP61	J00822A	QUANMET	08/22/00	11:10	MTW	S	CONC
59	DHP63	J00822A	QUANMET	08/22/00	11:13	MTW	S	CONC
60	DHP65	J00822A	QUANMET	08/22/00	11:16	MTW	S	CONC
61	DHP69	J00822A	QUANMET	08/22/00	11:19	MTW	S	CONC
62	DHP6D	J00822A	QUANMET	08/22/00	11:23	MTW	S	CONC
63	CCV2-6	J00822A	QUANMET	08/22/00	11:26	MTW	S	CONC
64	CCB6	J00822A	QUANMET	08/22/00	11:29	MTW	S	CONC
65	DHP6H	J00822A	QUANMET	08/22/00	11:32	MTW	S	CONC
66	DHP6L	J00822A	QUANMET	08/22/00	11:35	MTW	S	CONC
67	CCV2-7	J00822A	QUANMET	08/22/00	11:38	MTW	S	CONC
68	CCB7	J00822A	QUANMET	08/22/00	11:41	MTW	S	CONC
69	DHV64BF	J00822A	QUANMET	08/22/00	11:44	MTW	S	CONC
70	DHV64CF	J00822A	QUANMET	08/22/00	11:48	MTW	S	CONC
71	DHM8PF	J00822A	QUANMET	08/22/00	11:51	MTW	S	CONC
72	DHM8VF	J00822A	QUANMET	08/22/00	11:54	MTW	S	CONC
73	DHM8XE	J00822A	QUANMET	08/22/00	11:57	MTW	S	CONC
74	DHM91F	J00822A	QUANMET	08/22/00	12:00	MTW	S	CONC
75	DHM94F	J00822A	QUANMET	08/22/00	12:03	MTW	S	CONC
76	DHM94P5F	J00822A	QUANMET	08/22/00	12:07	MTW	S	CONC
77	DHM94SF	J00822A	QUANMET	08/22/00	12:10	MTW	S	CONC
78	DHM94DF	J00822A	QUANMET	08/22/00	12:13	MTW	S	CONC
79	CCV2-8	J00822A	QUANMET	08/22/00	12:16	MTW	S	CONC
80	CCB8	J00822A	QUANMET	08/22/00	12:19	MTW	S	CONC
81	DHM99F	J00822A	QUANMET	08/22/00	12:22	MTW	S	CONC
82	DHM9CF	J00822A	QUANMET	08/22/00	12:25	MTW	S	CONC
83	DHM9DF	J00822A	QUANMET	08/22/00	12:28	MTW	S	CONC
84	DHM9EF	J00822A	QUANMET	08/22/00	12:32	MTW	S	CONC
85	DHP5XF	J00822A	QUANMET	08/22/00	12:35	MTW	S	CONC
86	DHP61F	J00822A	QUANMET	08/22/00	12:38	MTW	S	CONC
87	DHP63F	J00822A	QUANMET	08/22/00	12:41	MTW	S	CONC
88	DHP65F	J00822A	QUANMET	08/22/00	12:44	MTW	S	CONC
89	DHP69F	J00822A	QUANMET	08/22/00	12:47	MTW	S	CONC
90	DHP6DF	J00822A	QUANMET	08/22/00	12:50	MTW	S	CONC
91	CCV2-9	J00822A	QUANMET	08/22/00	12:54	MTW	S	CONC
92	CCB9	J00822A	QUANMET	08/22/00	12:57	MTW	S	CONC
93	DHP6HF	J00822A	QUANMET	08/22/00	13:06	MTW	S	CONC
94	DHP6LF	J00822A	QUANMET	08/22/00	13:09	MTW	S	CONC
95	DHM9E RAW	J00822A	QUANMET	08/22/00	13:12	MTW	S	CONC
96	DHM9EF RAW	J00822A	QUANMET	08/22/00	13:15	MTW	S	CONC
97	CCV2-10	J00822A	QUANMET	08/22/00	13:18	MTW	S	CONC
98	CCB10	J00822A	QUANMET	08/22/00	13:21	MTW	S	CONC
99	DHP2EB	J00822A	QUANMET	08/22/00	13:25	MTW	S	CONC
100	DHP2EC	J00822A	QUANMET	08/22/00	13:28	MTW	S	CONC
101	DHMJE	J00822A	QUANMET	08/22/00	13:31	MTW	S	CONC
102	DHMJEP5	J00822A	QUANMET	08/22/00	13:34	MTW	S	CONC
103	DHMJES	J00822A	QUANMET	08/22/00	13:37	MTW	S	CONC
104	DHMJED	J00822A	QUANMET	08/22/00	13:41	MTW	S	CONC
105	DHMJT	J00822A	QUANMET	08/22/00	13:44	MTW	S	CONC
106	DHMK5	J00822A	QUANMET	08/22/00	13:47	MTW	S	CONC
107	DHMK9	J00822A	QUANMET	08/22/00	13:50	MTW	S	CONC

Analysis Report

Summary

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#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
108	DHMKE	J00822A	QUANMET	08/22/00	13:53	MTW	S	CONC
109	CCV2-11	J00822A	QUANMET	08/22/00	13:57	MTW	S	CONC
110	CCB11	J00822A	QUANMET	08/22/00	14:00	MTW	S	CONC
111	DHMJEF	J00822A	QUANMET	08/22/00	14:03	MTW	S	CONC
112	DHMJEP5F	J00822A	QUANMET	08/22/00	14:06	MTW	S	CONC
113	DHMJESF	J00822A	QUANMET	08/22/00	14:09	MTW	S	CONC
114	DHMJEDF	J00822A	QUANMET	08/22/00	14:12	MTW	S	CONC
115	DHMJTf	J00822A	QUANMET	08/22/00	14:16	MTW	S	CONC
116	DHMK5F	J00822A	QUANMET	08/22/00	14:19	MTW	S	CONC
117	DHMK9F	J00822A	QUANMET	08/22/00	14:22	MTW	S	CONC
118	DHMKEF	J00822A	QUANMET	08/22/00	14:25	MTW	S	CONC
119	DHMJE/2 NA	J00822A	QUANMET	08/22/00	14:36	MTW	S	CONC
120	DHMJEP10 NA	J00822A	QUANMET	08/22/00	14:39	MTW	S	CONC
121	CCV2-12	J00822A	QUANMET	08/22/00	14:42	MTW	S	CONC
122	CCB12	J00822A	QUANMET	08/22/00	14:45	MTW	S	CONC
123	DHMJES/2 NA	J00822A	QUANMET	08/22/00	14:48	MTW	S	CONC
124	DHJED/2 NA	J00822A	QUANMET	08/22/00	14:52	MTW	S	CONC
125	DHMJT/2 NA	J00822A	QUANMET	08/22/00	14:55	MTW	S	CONC
126	DHMKE/2 CA,NA	J00822A	QUANMET	08/22/00	14:58	MTW	S	CONC
127	DHMJEF/2 NA	J00822A	QUANMET	08/22/00	15:01	MTW	S	CONC
128	DHMJEP10F NA	J00822A	QUANMET	08/22/00	15:04	MTW	S	CONC
129	DHMJESF/2 NA	J00822A	QUANMET	08/22/00	15:07	MTW	S	CONC
130	DHMJEDF/2 NA	J00822A	QUANMET	08/22/00	15:10	MTW	S	CONC
131	DHMJTf/2 NA	J00822A	QUANMET	08/22/00	15:14	MTW	S	CONC
132	DHMKEF/2 NA	J00822A	QUANMET	08/22/00	15:19	MTW	S	CONC
133	CCV2-13	J00822A	QUANMET	08/22/00	15:22	MTW	S	CONC
134	CCB13	J00822A	QUANMET	08/22/00	15:25	MTW	S	CONC
135	DHMJE(RAW) ZN	J00822A	QUANMET	08/22/00	15:31	MTW	S	CONC
136	DHMJEF(RAW) ZN	J00822A	QUANMET	08/22/00	15:35	MTW	S	CONC
137	DHMK5(RAW) ZN	J00822A	QUANMET	08/22/00	15:38	MTW	S	CONC
138	DHMK5F(RAW) ZN	J00822A	QUANMET	08/22/00	15:41	MTW	S	CONC
139	DHMJKE(RAW) CA	J00822A	QUANMET	08/22/00	15:44	MTW	S	CONC
140	CCV2-14	J00822A	QUANMET	08/22/00	15:47	MTW	S	CONC
141	CCB14	J00822A	QUANMET	08/22/00	15:51	MTW	S	CONC

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Standardization Rpt.

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Method: QUANMET Standard: STD1
Run Time: 08/22/00 07:55:11

Elem	AG	AL	AS	B	BA	BE	CA
Avge	-.00080	.00825	.00035	.00034	.00000	.00245	-.00028
SDev	.00028	.00070	.00092	.00044	.00000	.00010	.00077
%RSD	35.355	8.4848	261.34	129.17	.00000	4.0816	276.58

#1	-.00040	.00900	-.00060	-.00008	.00000	.00240	.00002
#2	-.00100	.00800	-.00020	.00094	.00000	.00240	-.00126
#3	-.00100	.00740	.00140	.00012	.00000	.00240	-.00045
#4	-.00080	.00860	.00080	.00040	.00000	.00260	.00056

Elem	CD	CO	CR	CU	FE	K	LI
Avge	-.00003	.00005	-.00035	.00020	.00075	-.04650	.00032
SDev	.00009	.00034	.00060	.00016	.00030	.00878	.00024
%RSD	303.76	683.13	170.63	81.650	40.000	18.874	74.751

#1	.00008	.00040	-.00060	.00040	.00100	-.03780	.00044
#2	-.00008	-.00040	-.00020	.00000	.00040	-.05680	.00016
#3	-.00012	.00000	-.00100	.00020	.00100	-.05060	.00008
#4	.00000	.00020	.00040	.00020	.00060	-.04080	.00060

Elem	MG	MN	MO	NA	NI	PB	SB
Avge	-.00005	.00000	-.00005	.06070	-.00028	.00045	-.00020
SDev	.00077	.00000	.00025	.00262	.00055	.00079	.00037
%RSD	1544.9	.00000	503.32	4.3170	196.00	175.45	182.57

#1	.00100	.00000	.00000	.06400	-.00011	-.00020	-.00040
#2	-.00040	.00000	-.00040	.05840	.00004	.00080	.00000
#3	-.00080	.00000	.00000	.05880	-.00111	-.00020	.00020
#4	.00000	.00000	.00020	.06160	.00005	.00140	-.00060

Elem	SE	SI	SN	SR	TI	TL	V
Avge	.00025	.00195	.00025	.00021	.00210	-.00010	.00000
SDev	.00161	.00019	.00125	.00016	.00020	.00096	.00000
%RSD	644.57	9.8198	499.07	78.655	9.5238	959.17	.00000

#1	-.00080	.00200	.00060	.00024	.00200	-.00100	.00000
#2	-.00080	.00180	.00100	.00020	.00200	-.00060	.00000
#3	.00000	.00180	-.00160	.00040	.00240	.00000	.00000
#4	.00260	.00220	.00100	.00000	.00200	.00120	.00000

Elem	ZN
Avge	.00017
SDev	.00014
%RSD	82.711

#1	.00032
#2	.00024
#3	.00000
#4	.00012

Standardization Rpt.

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Method: QUANMET Standard: STD5A 004-155-1
 Run Time: 08/22/00 07:58:20

Elem	AG	AS	B	BA	BE	CD	CO
Avge	.27255	.52750	.58641	3.9799	15.691	.91880	1.4395
SDev	.00076	.00498	.00231	.0145	.064	.00271	.0015
%RSD	.27701	.94432	.39377	.36313	.41085	.29468	.10233

#1	.27240	.53000	.58960	3.9999	15.784	.91655	1.4406
#2	.27280	.52020	.58494	3.9776	15.638	.91896	1.4386
#3	.27340	.53120	.58660	3.9766	15.674	.92255	1.4410
#4	.27160	.52860	.58451	3.9654	15.666	.91712	1.4380

Elem	CR	CU	LI	MN	MO	NI	PB
Avge	3.7618	2.2666	4.2716	2.0326	.40600	1.7166	.25630
SDev	.0055	.0080	.0177	.0040	.00103	.0049	.00074
%RSD	.14560	.35517	.41390	.19719	.25438	.28386	.28848

#1	3.7642	2.2786	4.2970	2.0362	.40720	1.7155	.25600
#2	3.7554	2.2624	4.2689	2.0314	.40560	1.7140	.25580
#3	3.7680	2.2642	4.2634	2.0352	.40640	1.7238	.25600
#4	3.7596	2.2614	4.2569	2.0274	.40480	1.7132	.25740

Elem	SB	SE	SI	SN	SR	TI	TL
Avge	.19150	.51075	.34290	.97270	7.6559	6.1067	.34405
SDev	.00035	.00299	.00081	.00669	.0270	.0178	.00407
%RSD	.18089	.58552	.23572	.68781	.35239	.29093	1.1841

#1	.19120	.50980	.34180	.96620	7.6920	6.1306	.33880
#2	.19140	.50900	.34280	.98020	7.6527	6.1016	.34300
#3	.19200	.51520	.34360	.96800	7.6523	6.1066	.34640
#4	.19140	.50900	.34340	.97640	7.6266	6.0880	.34800

Elem	V	ZN
Avge	1.6059	1.5240
SDev	.0044	.0019
%RSD	.27671	.12439

#1	1.6114	1.5260
#2	1.6026	1.5220
#3	1.6076	1.5252
#4	1.6020	1.5227

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Standardization Rpt.

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Method: QUANMET Standard: STD5B 0014-155-2

Run Time: 08/22/00 08:01:29

Elem	AL	CA	FE	K	MG	NA
Avge	11.188	25.404	30.044	2.3735	7.4689	44.806
SDev	.045	.173	.111	.0106	.0298	.400
%RSD	.40622	.68196	.36957	.44480	.39887	.89280
#1	11.141	25.563	30.066	2.3648	7.4574	44.323
#2	11.246	25.339	30.094	2.3880	7.5066	45.299
#3	11.166	25.189	29.882	2.3666	7.4362	44.846
#4	11.199	25.525	30.133	2.3744	7.4752	44.754

Standardization

Report

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Method: QUANMET

Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AG	328.068	STD5A	STD1	7.13856	.005711	08/22/00 08:01:29
AL	308.215	STD5B	STD1	8.94458	-.073793	08/22/00 08:01:29
AS	193.696	STD5A	STD1	19.2970	-.006754	08/22/00 08:01:29
B ₋	249.600	STD5A	STD1	17.0972	-.005883	08/22/00 08:01:29
BA	493.409	STD5A	STD1	2.51264	.000000	08/22/00 08:01:29
BE	313.042	STD5A	STD1	.639115	-.001566	08/22/00 08:01:29
CA	317.933	STD5B	STD1	3.93636	.001100	08/22/00 08:01:29
CD	228.802	STD5A	STD1	11.0465	.000325	08/22/00 08:01:29
CO	228.616	STD5A	STD1	6.98004	-.000349	08/22/00 08:01:29
CR	267.716	STD5A	STD1	2.65879	.000931	08/22/00 08:01:29
CU	324.754	STD5A	STD1	4.40817	-.000882	08/22/00 08:01:29
FE	259.940	STD5B	STD1	3.32858	-.002496	08/22/00 08:01:29
K ₋	766.491	STD5B	STD1	41.3232	1.92153	08/22/00 08:01:29
LI	670.789	STD5A	STD1	2.34124	-.000751	08/22/00 08:01:29
MG	279.079	STD5B	STD1	13.3889	.000669	08/22/00 08:01:29
MN	257.610	STD5A	STD1	4.91830	.000000	08/22/00 08:01:29
MO	202.030	STD5A	STD1	24.6275	.001231	08/22/00 08:01:29
NA	588.995	STD5B	STD1	2.23489	-.135658	08/22/00 08:01:29
NI	231.604	STD5A	STD1	5.82186	.001644	08/22/00 08:01:29
PB	220.353	STD5A	STD1	37.9355	-.017071	08/22/00 08:01:29
SB	206.838	STD5A	STD1	52.2253	.010445	08/22/00 08:01:29
SE	196.026	STD5A	STD1	19.5886	-.004897	08/22/00 08:01:29
SI	288.158	STD5A	STD1	28.9555	-.056463	08/22/00 08:01:29
SN	189.989	STD5A	STD1	10.2726	-.002568	08/22/00 08:01:29
SR	409.552	STD5A	STD1	1.30622	-.000273	08/22/00 08:01:29
TI	334.941	STD5A	STD1	1.63811	-.003440	08/22/00 08:01:29
TL	190.864	STD5A	STD1	58.3866	.005839	08/22/00 08:01:29
V ₋	292.402	STD5A	STD1	6.09442	.000000	08/22/00 08:01:29
ZN	213.856	STD5A	STD1	6.58509	-.001104	08/22/00 08:01:29

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Michael Nuesch 8-22-00

Analysis Report

08/22/00 08:07:44 AM

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Method: QUANMET Sample Name: ICV2-1 0057-005-2 Operator: MTW
 Run Time: 08/22/00 08:04:38
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50940	25.385	1.0034	1.0144	1.0063	.98603	25.573
SDev	.00263	.061	.0174	.0214	.0035	.00170	.119
%RSD	.51715	.23937	1.7384	2.1118	.34599	.17220	.46678
#1	.51226	25.456	1.0172	.99513	1.0098	.98769	25.665
#2	.50793	25.359	1.0143	1.0340	1.0040	.98450	25.518
#3	.50652	25.316	1.0031	1.0319	1.0027	.98462	25.431
#4	.51087	25.411	.97887	.99660	1.0088	.98729	25.678
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.55000	27.500	1.1000	1.1000	1.1000	1.1000	27.500
Low	.45000	22.500	.90000	.90000	.90000	.90000	22.500
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0198	1.0108	1.0215	.99926	26.208	24.769	1.0113
SDev	.0097	.0050	.0064	.00162	.084	.164	.0026
%RSD	.95058	.49424	.62386	.16219	.32065	.66147	.26091
#1	1.0124	1.0139	1.0222	1.0002	26.263	24.608	1.0147
#2	1.0194	1.0097	1.0200	.99838	26.164	24.691	1.0118
#3	1.0138	1.0042	1.0142	.99749	26.113	24.790	1.0104
#4	1.0336	1.0153	1.0296	1.0010	26.293	24.988	1.0084
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	1.1000	1.1000	1.1000	27.500	27.500	1.1000
Low	.90000	.90000	.90000	.90000	22.500	22.500	.90000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	25.431	1.0139	1.0026	25.072	1.0212	1.0153	1.0225
SDev	.095	.0037	.0085	.077	.0081	.0262	.0121
%RSD	.37326	.36854	.85200	.30732	.79801	2.5851	1.1796
#1	25.536	1.0176	1.0050	25.183	1.0252	1.0381	1.0330
#2	25.356	1.0107	1.0050	25.019	1.0172	1.0228	1.0120
#3	25.346	1.0107	.99024	25.021	1.0121	1.0228	1.0329
#4	25.488	1.0166	1.0100	25.065	1.0304	.97742	1.0121
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	27.500	1.1000	1.1000	27.500	1.1000	1.1000	1.1000
Low	22.500	.90000	.90000	22.500	.90000	.90000	.90000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0083	1.0233	1.0175	1.0007	.99425	5.0594	1.0014
SDev	.0317	.0322	.0179	.0029	.00381	.1157	.0040
%RSD	3.1427	3.1510	1.7603	.29301	.38369	2.2867	.40257
#1	1.0046	1.0393	1.0144	1.0032	.99777	5.1902	1.0014
#2	.96511	.97549	1.0020	.99911	.99220	5.1212	.99654

Analysis Report

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#3	1.0355	1.0335	1.0432	.99728	.98991	4.9816	1.0011
#4	1.0281	1.0451	1.0102	1.0030	.99712	4.9447	1.0064

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	1.1000	1.1000	1.1000	1.1000	5.5000	1.1000
Low	.90000	.90000	.90000	.90000	.90000	4.5000	.90000

Elem	ZN
Units	ppm
Avge	1.0136
SDev	.0045
%RSD	.43918

#1	1.0117
#2	1.0097
#3	1.0131
#4	1.0199

Errors	LC Pass
High	1.1000
Low	.90000

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Analysis Report

08/22/00 08:10:52 AM

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Method: QUANMET Sample Name: ICB1

Operator: MTW

Run Time: 08/22/00 08:07:46

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00036	-.00448	-.00189	.01096	.00005	.00003	.00080
SDev	.00180	.00776	.02752	.01747	.00010	.00007	.00190
%RSD	503.35	173.22	1452.6	159.41	200.00	230.94	237.68
#1	-.00000	-.01118	.00106	-.00448	.00000	-.00003	.00054
#2	-.00000	-.00581	.02031	-.00247	.00021	.00010	.00082
#3	.00143	.00667	.01249	.03173	.00000	.00010	.00323
#4	-.00285	-.00760	-.04143	.01906	.00000	-.00003	-.00140
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00010	.00105	.00386	.00044	-.00017	.18182	.00007
SDev	.00281	.00001	.00153	.00051	.00176	.10245	.00071
%RSD	2679.4	.72107	39.808	115.25	1056.4	56.347	1024.7
#1	.00253	.00104	.00572	.00000	-.00116	.16116	-.00028
#2	-.00211	.00105	.00412	.00000	-.00183	.25207	-.00036
#3	-.00293	.00105	.00359	.00088	.00017	.26860	.00112
#4	.00209	.00104	.00199	.00088	.00216	.04546	-.00020
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00268	.00000	.00246	-.00089	-.00167	-.00373	.02082
SDev	.00594	.00000	.00246	.00725	.00538	.02090	.02695
%RSD	221.74	103.61	100.00	810.87	322.43	560.11	129.41
#1	.00067	.00000	.00123	-.01050	-.00477	.00580	.05214
#2	-.00469	-.00000	.00123	.00693	.00637	-.01705	-.01047
#3	.00602	.00000	.00616	.00112	-.00464	-.02459	.03125
#4	.00870	.00000	.00123	-.00112	-.00363	.02091	.01037
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00294	-.01013	.00523	-.00030	-.00008	-.00293	.00006
SDev	.04321	.03101	.01356	.00025	.00016	.04987	.00005
%RSD	1470.3	305.95	259.04	81.434	200.00	1704.2	85.723
#1	-.00882	.00145	-.00233	-.00027	.00016	-.01751	.00004
#2	.04211	.00724	.02204	-.00049	-.00016	-.06421	.00003

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#3	.01469	.00724	-.00859	-.00049	-.00016	.01751	.00013
#4	-.05974	-.05646	.00981	.00003	-.00016	.05252	.00003

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00000
SDev	.00066
%RSD	18123.

#1	-.00031
#2	-.00035
#3	-.00032
#4	.00100

Errors	LC Pass
High	.02000
Low	-.02000

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QC Standard

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Method: QUANMET Sample Name: ICSEA 0057-011-1 Operator: MTW
 Run Time: 08/22/00 08:10:55
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00042	491.77	-.18485	-.03539	.00151	.00002	484.05
SDev	.00139	.69	.15226	.00275	.00041	.00008	1.35
%RSD	329.33	.14036	82.368	7.7822	27.217	361.37	.27807

#1	-.00153	492.71	-.10056	-.03943	.00101	-.00004	482.03
#2	-.00008	491.80	-.20913	-.03367	.00151	.00009	484.58
#3	.00140	491.09	-.04157	-.03485	.00151	-.00005	484.75
#4	-.00148	491.49	-.38813	-.03360	.00201	.00008	484.82

Errors	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value		500.00					500.00
Range		20.000					20.000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00219	.01051	.00186	-.00656	185.15	.37811	.00196
SDev	.00258	.00134	.00276	.00085	.12	.28996	.00062
%RSD	118.08	12.747	148.33	12.992	.06585	76.687	31.602

#1	-.00268	.00947	-.00067	-.00723	184.99	.06198	.00242
#2	-.00289	.01226	-.00013	-.00722	185.16	.23554	.00112
#3	-.00463	.01087	.00518	-.00545	185.28	.49175	.00244
#4	.00146	.00945	.00306	-.00634	185.19	.72316	.00187

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK	NOCHECK
Value					200.00		
Range					20.000		

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	485.24	.00438	.00552	.01050	-.01376	.08054	-.02347
SDev	.29	.00093	.00741	.00203	.01468	.03036	.01006
%RSD	.06023	21.362	134.08	19.345	106.71	37.699	42.862

#1	485.60	.00505	-.00558	.01006	-.01056	.06481	-.02079
#2	485.10	.00315	.00922	.01184	-.03022	.12609	-.03142
#3	484.92	.00517	.00923	.01229	-.01892	.06576	-.03130
#4	485.33	.00415	.00922	.00782	.00465	.06552	-.01036

Errors	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	500.00						
Range	20.000						

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02846	.04348	-.04909	.01374	-.02138	.48188	.00407
SDev	.08464	.01593	.03535	.00005	.00031	.08623	.00179
%RSD	297.44	36.635	72.023	.39150	1.4673	17.894	43.932

#1	-.01900	.02467	-.02702	.01382	-.02179	.51281	.00477
#2	.04022	.05937	-.06813	.01371	-.02113	.49935	.00140

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QC Standard

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#3	.14239	.05363	-.08865	.01371	-.02113	.35800	.00506
#4	-.04979	.03626	-.01255	.01371	-.02146	.55737	.00506

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem	ZN
Units	ppm
Avge	.00204
SDev	.00180
%RSD	88.539

#1	.00395
#2	.00320
#3	.00053
#4	.00046

Errors	NOCHECK
Value	
Range	

Method: QUANMET Sample Name: ICSAB 0014-187-1 Operator: MTW
 Run Time: 08/22/00 08:14:03
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.94840	489.58	.87439	.93963	.46768	.45700	478.12
SDev	.00366	2.01	.11126	.01151	.00251	.00152	2.64
%RSD	.38571	.41133	12.724	1.2254	.53651	.33238	.55231

#1	.94677	487.05	.86578	.93929	.46448	.45509	476.36
#2	.94401	488.87	.80825	.92729	.46700	.45649	476.26
#3	.95151	490.98	Q.78951	.93690	.46901	.45839	481.91
#4	.95132	491.40	1.0340	.95505	.47022	.45802	477.94

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	500.00	1.0000	1.0000	.50000	.50000	500.00
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.95603	.45298	.44642	.47820	183.83	10.087	1.0064
SDev	.00690	.00461	.00343	.00258	.80	.303	.0063
%RSD	.72179	1.0179	.76817	.53893	.43595	3.0045	.62159

#1	.96015	.44634	.44229	.47614	183.01	10.426	1.0014
#2	.95630	.45612	.44496	.47618	183.37	9.6903	1.0060
#3	.96147	.45610	.44974	.47894	184.81	10.087	1.0029
#4	.94622	.45335	.44868	.48153	184.10	10.145	1.0153

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	.50000	.50000	.50000	200.00	10.000	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	480.72	.45584	.91038	10.036	.89430	.98555	.97586
SDev	1.93	.00277	.01209	.064	.01364	.01665	.01347
%RSD	.40252	.60830	1.3277	.63913	1.5257	1.6891	1.3801

#1	478.45	.45344	.89549	9.9651	.88652	.99276	.96023
#2	479.81	.45351	.92509	10.021	.91399	.96911	.98123
#3	482.57	.45880	.91053	10.036	.89277	1.0054	.99143
#4	482.07	.45760	.91043	10.120	.88392	.97489	.97052

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.00	.50000	1.0000	10.000	1.0000	1.0000	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.97011	1.0482	.86012	.93776	.89072	9.6581	.45849
SDev	.13470	.0229	.02101	.00390	.00238	.2120	.00246
%RSD	13.885	2.1823	2.4427	.41589	.26756	2.1948	.53555

#1	.80636	1.0671	.85117	.93268	.88769	9.4739	.45697
#2	.95227	1.0207	.84311	.93675	.88998	9.4818	.45755

#3	.98741	1.0671	.89067	.94041	.89293	9.8873	.46215
#4	1.1344	1.0381	.85552	.94119	.89228	9.7895	.45727

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	1.0000	1.0000	1.0000	1.0000	10.000	.50000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	ZN
Units	ppm
Avge	.93248
SDev	.00630
%RSD	.67504

#1	.92507
#2	.92944
#3	.93806
#4	.93735

Errors	QC Pass
Value	1.0000
Range	20.000

Method: QUANMET Sample Name: DJ5HPBT Operator: MTW
Run Time: 08/22/00 08:19:26
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00178	-.00267	-.01546	.00710	.00025	-.00006	.01445
SDev	.00180	.00946	.02348	.01297	.00029	.00006	.00368
%RSD	101.11	353.87	151.93	182.61	115.47	100.00	25.482
#1	-.00142	-.01663	.00492	.00826	.00000	-.00003	.01022
#2	.00001	-.00046	-.04924	-.00099	.00050	-.00003	.01559
#3	-.00142	.00315	-.01068	.02495	.00000	-.00016	.01309
#4	-.00428	.00324	-.00682	-.00381	.00050	-.00003	.01888
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK
High	.50000		.50000		10.000		
Low	-.50000		-.50000		-10.000		
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00060	.00070	.00266	.00022	.03262	.33472	.00014
SDev	.00173	.00209	.00186	.00044	.00220	.15013	.00071
%RSD	287.03	299.13	70.001	197.64	6.7483	44.854	517.52
#1	-.00194	-.00174	.00465	.00000	.03012	.16116	.00019
#2	.00127	-.00035	.00199	.00000	.03212	.48348	-.00028
#3	.00046	.00244	.00040	.00000	.03278	.26034	-.00048
#4	-.00219	.00245	.00359	.00089	.03545	.43389	.00112
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.10000		.50000				
Low	-.10000		-.50000				
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00669	.00050	.00000	.00000	.00196	.00951	.00782
SDev	.01489	.00057	.00620	.00345	.00318	.02272	.01565
%RSD	222.41	113.07	127060.	67e6	162.40	238.90	200.29
#1	-.00469	.00001	.00616	-.00380	.00501	.03603	.02080
#2	.02209	.00099	.00124	.00246	.00377	.02085	.00001
#3	-.00736	.00001	.00124	.00335	.00123	-.00944	-.01046
#4	.01674	.00099	-.00861	-.00201	-.00218	-.00940	.02091
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						.50000	
Low						-.50000	
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01461	.01158	.00775	-.00012	-.00025	.04053	.00001
SDev	.03511	.00290	.01520	.00025	.00068	.02523	.00012
%RSD	240.40	25.000	196.11	207.26	274.87	62.245	2238.1
#1	-.02441	.01303	.02630	-.00001	-.00082	.05225	.00013
#2	.00694	.00724	-.00256	.00003	.00016	.04055	.00003

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#3	.01870	.01303	.01383	-.00001	-.00082	.00548	.00002
#4	-.05965	.01303	-.00657	-.00049	.00049	.06385	-.00016

Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.25000						
Low	-.25000						

Elem	ZN
Units	ppm
Avge	.00084
SDev	.00026
%RSD	31.479

#1	.00097
#2	.00097
#3	.00098
#4	.00044

Errors	NOCHECK
High	
Low	

Method: QUANMET Sample Name: DJ3ACBT Operator: MTW
 Run Time: 08/22/00 08:22:34
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00145	.02189	.15798	.01392	.00201	-.00004	.21883
SDev	.00232	.00888	.03284	.01533	.00024	.00001	.00442
%RSD	160.54	40.545	20.788	110.09	12.007	17.178	2.0211
#1	.00146	.02098	.11260	.01508	.00171	-.00005	.22381
#2	-.00140	.01200	.18986	.00302	.00231	-.00004	.21589
#3	.00143	.02101	.17058	.00242	.00201	-.00003	.21440
#4	.00430	.03359	.15888	.03519	.00201	-.00004	.22121
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK
High	.50000		.50000		10.000		
Low	-.50000		-.50000		-10.000		
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00066	.00174	.00346	.00243	.02580	.45662	-.00012
SDev	.00184	.00419	.00176	.00111	.00116	.26199	.00097
%RSD	280.11	240.07	50.869	45.822	4.4931	57.376	779.45
#1	.00130	.00523	.00518	.00353	.02680	.69836	.00074
#2	.00041	-.00035	.00146	.00265	.02480	.35125	-.00133
#3	-.00160	-.00314	.00252	.00088	.02480	.13637	-.00048
#4	-.00273	.00523	.00465	.00265	.02681	.64051	.00057
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.10000		.50000				
Low	-.10000		-.50000				
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03615	.00124	.00124	S-.13566	-.00171	-.01514	.00252
SDev	.01205	.00049	.00402	.00000	.00615	.01304	.01972
%RSD	33.333	39.764	325.59	.00000	359.22	86.097	784.08
#1	.04351	.00099	.00616	S-.13566	-.00014	-.00177	-.00010
#2	.03548	.00099	.00124	S-.13566	-.00336	-.03228	-.01047
#3	.01941	.00099	-.00369	S-.13566	-.00903	-.01713	.03117
#4	.04619	.00197	.00124	S-.13566	.00568	-.00938	-.01054
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						.50000	
Low						-.50000	
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02246	.03623	.02621	.00082	.00156	.04350	.00277
SDev	.04574	.00003	.02282	.00015	.00241	.05255	.00258
%RSD	203.67	.08984	87.077	18.839	155.06	120.82	92.849
#1	-.00874	.03626	.02414	.00066	.00115	.01717	.00500
#2	-.02442	.03626	-.00261	.00082	-.00016	.12233	.00490

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#3	.02651	.03619	.03045	.00103	.00016	.01729	-.00007
#4	-.08318	.03621	.05284	.00077	.00508	.01720	.00125

Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.25000						
Low	-.25000						

Elem	ZN
Units	ppm
Avge	.01128
SDev	.00062
%RSD	5.5081

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#1	.01153
#2	.01077
#3	.01077
#4	.01204

Errors	NOCHECK
High	
Low	

Method: QUANMET Sample Name: DJ5HPCT Operator: MTW
 Run Time: 08/22/00 08:25:42
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04666	2.0356	2.0913	1.0183	2.0786	.05175	L.08325
SDev	.00178	.0037	.0347	.0255	.0173	.00028	.00364
%RSD	3.8217	.18153	1.6588	2.5078	.83145	.53331	4.3665
#1	.04844	2.0306	2.0933	1.0361	2.0718	.05166	L.08159
#2	.04702	2.0360	2.0469	.98140	2.0643	.05153	L.08367
#3	.04699	2.0361	2.0933	1.0210	2.0746	.05167	L.08812
#4	.04419	2.0396	2.1317	1.0347	2.1037	.05216	L.07964
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Low
High	.06000	2.4000	2.4000		2.4000	.06000	60.000
Low	.04000	1.6000	1.6000		1.6000	.04000	40.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04786	.51849	.21268	.25954	1.1106	L.25414	1.0183
SDev	.00273	.00181	.00153	.00151	.0054	.17354	.0148
%RSD	5.7000	.34911	.71932	.57973	.48694	68.286	1.4537
#1	.05151	.51778	.21228	.25888	1.1059	L.38431	1.0100
#2	.04581	.52059	.21175	.25800	1.1059	L.40910	1.0094
#3	.04839	.51918	.21494	.25976	1.1159	L.17769	1.0135
#4	.04574	.51639	.21174	.26152	1.1146	L.04546	1.0404
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	NOCHECK
High	.06000	.60000	.24000	.30000	1.2000	60.000	
Low	.04000	.40000	.16000	.20000	.80000	40.000	
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.01741	.52236	.00386	L.02771	.52734	.50791	L.00179
SDev	.00256	.00094	.00492	.00274	.00519	.02360	.01803
%RSD	14.730	.18052	127.59	9.8989	.98474	4.6471	1005.4
#1	L.01674	.52162	.00632	L.02794	.52848	.51927	L-.00342
#2	L.01941	.52162	.00632	L.02749	.53403	.48139	L-.01379
#3	L.01941	.52359	.00632	L.03106	.52487	.53452	L.02783
#4	L.01406	.52260	-.00353	L.02436	.52198	.49646	L-.00345
Errors	LC Low	LC Pass	NOCHECK	LC Low	LC Pass	LC Pass	LC Low
High	60.000	.60000		60.000	.60000	.60000	.60000
Low	40.000	.40000		40.000	.40000	.40000	.40000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0627	.02246	-.00338	1.0435	.00049	2.0214	.51243
SDev	.0516	.01105	.01195	.0078	.00046	.0548	.00390
%RSD	2.5006	49.174	353.81	.74599	94.281	2.7118	.76126
#1	2.1253	.01957	-.01059	1.0401	.00049	2.0682	.51247
#2	2.0000	.03115	-.01475	1.0371	.00082	2.0682	.51247

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#3	2.0705	.03109	-.00017	1.0418	.00082	1.9864	.50760
#4	2.0548	.00805	.01201	1.0548	-.00016	1.9630	.51716

Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass
High	2.4000					2.4000	.60000
Low	1.6000					1.6000	.40000

Elem	ZN
Units	ppm
Avge	.51592
SDev	.00381
%RSD	.73951

#1	.51528
#2	.51078
#3	.51868
#4	.51895

Errors	LC Pass
High	.60000
Low	.40000

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Method: QUANMET Sample Name: DHX40T

Operator: MTW

Run Time: 08/22/00 08:28:55

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00064	.39304	.11993	.10748	.97933	.00034	128.44
SDev	.00273	.00957	.05354	.00146	.00646	.00000	.58
%RSD	426.02	2.4355	44.641	1.3558	.65972	.03560	.45411
#1	.00150	.39841	.03981	.10888	.97993	.00034	128.12
#2	-.00421	.37874	.14417	.10748	.98617	.00034	127.99
#3	.00150	.39839	.15173	.10809	.98064	.00034	129.28
#4	-.00136	.39661	.14403	.10547	.97059	.00034	128.37
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00097	-.00084	.00345	.00729	.27094	1.0455	.00508
SDev	.00202	.00198	.00235	.00111	.00100	.3216	.00057
%RSD	208.11	234.47	68.126	15.219	.36830	30.759	11.277
#1	-.00011	.00055	.00199	.00708	.27044	1.1529	.00534
#2	-.00128	.00056	.00093	.00708	.27177	.58266	.00440
#3	.00214	-.00085	.00571	.00884	.27177	1.3265	.00572
#4	.00313	-.00364	.00518	.00619	.26977	1.1199	.00487
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	16.089	.08589	.00004	S-.13566	.01095	.00729	.01838
SDev	.087	.00049	.00246	.00000	.00355	.01997	.02153
%RSD	.54069	.57332	6078.8	.00000	32.380	274.08	117.15
#1	16.070	.08565	.00127	S-.13566	.00802	-.00975	.02098
#2	16.148	.08663	.00127	S-.13566	.00775	.03579	.02098
#3	16.164	.08565	.00127	S-.13566	.01376	-.00224	-.01033
#4	15.974	.08565	-.00365	S-.13566	.01427	.00535	.04189
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01006	4.8762	-.00448	.58803	-.00238	.02393	.00488
SDev	.04529	.0434	.00540	.00346	.00077	.06205	.00005
%RSD	450.24	.89072	120.64	.58758	32.592	259.27	.93137
#1	-.06295	4.8545	-.00652	.58836	-.00180	.09691	.00490
#2	-.03161	4.8545	-.00241	.59175	-.00344	.02684	.00490

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#3	.01933	4.9413	-.01078	.58862	-.00180	.02684	.00491
#4	.03499	4.8545	.00180	.58339	-.00246	-.05486	.00482
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.04788
SDev	.00101
%RSD	2.1078

#1	.04702
#2	.04888
#3	.04862
#4	.04700

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHX40P5T

Operator: MTW

Run Time: 08/22/00 08:32:03

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00073	.08134	.01276	.01268	.20593	-.00000	26.831
SDev	.00083	.00446	.03850	.00095	.00140	.00006	.145
%RSD	113.84	5.4823	301.60	7.4647	.68205	1765.6	.54111
#1	.00001	.07997	.00025	.01133	.20666	-.00003	27.002
#2	.00001	.08713	-.00366	.01273	.20686	-.00003	26.901
#3	.00144	.08181	-.01520	.01333	.20636	-.00003	26.706
#4	.00146	.07644	.06967	.01333	.20385	.00008	26.715
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00105	-.00080	.00186	.00111	.05592	.40290	.00061
SDev	.00092	.00209	.00196	.00085	.00137	.21268	.00024
%RSD	87.834	262.26	105.23	76.434	2.4557	52.788	40.380
#1	.00031	-.00185	.00200	.00177	.05608	.50001	.00093
#2	-.00146	-.00185	.00200	.00088	.05609	.22728	.00065
#3	-.00172	-.00184	-.00066	.00000	.05409	.22728	.00038
#4	-.00135	.00234	.00412	.00177	.05742	.65704	.00046
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.4142	.01846	.00370	281.42	.00526	-.01716	-.00259
SDev	.0214	.00049	.00284	2.17	.00742	.01076	.01787
%RSD	.62540	2.6612	76.807	.77143	141.10	62.709	689.85
#1	3.4336	.01772	.00617	282.30	-.00384	-.01720	-.01055
#2	3.4309	.01871	.00617	282.83	.00527	-.03236	.00000
#3	3.3907	.01870	.00124	282.37	.00526	-.00963	-.02081
#4	3.4014	.01870	.00124	278.19	.01432	-.00945	.02099
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02140	.97437	-.00308	.12378	-.00041	-.00923	.00129
SDev	.05690	.00948	.01097	.00086	.00056	.04405	.00241
%RSD	265.88	.97317	356.11	.69192	136.63	477.01	186.19
#1	-.04393	.97435	.00562	.12462	-.00115	.02873	.00012
#2	.05793	.97435	-.00667	.12420	-.00016	-.04133	.00012

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#3	-.07527	.96277	-.01703	.12368	-.00049	-.05299	.00002
#4	-.02433	.98600	.00576	.12263	.00016	.02865	.00491
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00887
SDev	.00095
%RSD	10.709

#1	.00966
#2	.00886
#3	.00941
#4	.00753

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHX40ST Operator: MTW
 Run Time: 08/22/00 08:35:11
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.96050	.36625	5.2127	.10400	47.352	.00044	122.66
SDev	.00294	.00835	.0451	.00000	.291	.00006	.34
%RSD	.30639	2.2797	.86574	.00387	.61559	13.584	.28121
#1	.96227	.36272	5.1462	.10400	47.521	.00035	122.17
#2	.95799	.35734	5.2466	.10400	47.283	.00048	122.69
#3	.96372	.37693	5.2309	.10401	47.632	.00047	122.88
#4	.95801	.36802	5.2271	.10400	46.974	.00047	122.91
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.99672	.00031	4.6829	.00729	.24115	1.0393	.00499
SDev	.00585	.00276	.0095	.00044	.00231	.1710	.00080
%RSD	.58712	888.84	.20236	6.0523	.95666	16.457	16.040
#1	.98901	-.00185	4.6703	.00707	.23782	.97109	.00393
#2	.99817	.00383	4.6831	.00708	.24315	.97109	.00487
#3	1.0031	-.00194	4.6932	.00707	.24181	.92151	.00534
#4	.99656	.00120	4.6852	.00796	.24182	1.2934	.00580
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	15.267	.08220	.00127	S2664.1	.00922	4.8208	.01123
SDev	.055	.00057	.00402	1776.2	.00553	.0388	.01788
%RSD	.36117	.69257	317.33	66.670	60.004	.80497	159.15
#1	15.293	.08170	-.00366	S3552.2	.00678	4.8340	.00345
#2	15.229	.08269	.00619	S3552.2	.00871	4.7659	.03476
#3	15.331	.08269	.00127	S-.13566	.00431	4.8264	-.00715
#4	15.213	.08171	.00127	S3552.4	.01706	4.8568	.01389
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0545	4.6632	.00319	.55798	-.00180	.02715	.00167
SDev	.0538	.0116	.01948	.00310	.00038	.03693	.00253
%RSD	5.0979	.24787	611.33	.55466	20.995	136.02	151.12
#1	1.0026	4.6690	.02421	.55919	-.00213	.05057	-.00058
#2	1.1084	4.6690	-.01879	.55747	-.00147	.01544	-.00037

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#3	1.0927	4.6690	-.00666	.56128	-.00213	-.01955	.00322
#4	1.0143	4.6459	.01398	.55396	-.00147	.06215	.00442
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.04607
SDev	.00143
%RSD	3.1005

#1	.04437
#2	.04777
#3	.04648
#4	.04567

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DHX40DT

Operator: MTW

Run Time: 08/22/00 08:38:23

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.95584	.32600	5.1745	.10443	47.353	.00042	120.58
SDev	.00340	.01295	.0668	.00100	.486	.00007	.64
%RSD	.35559	3.9716	1.2904	.96031	1.0260	17.734	.53478
#1	.96083	.33584	5.1928	.10393	47.992	.00048	120.20
#2	.95512	.31979	5.1041	.10393	46.922	.00048	121.24
#3	.95369	.31076	5.2586	.10594	47.463	.00035	119.88
#4	.95369	.33763	5.1426	.10393	47.033	.00035	121.00
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.99636	-.00178	4.6703	.00729	.20237	.95457	.00400
SDev	.01079	.00236	.0135	.00111	.00354	.39086	.00080
%RSD	1.0834	132.25	.28953	15.225	1.7486	40.947	19.966
#1	.99030	-.00209	4.6687	.00619	.20320	.67357	.00280
#2	1.0058	-.00159	4.6868	.00883	.20387	1.5248	.00440
#3	.98423	-.00460	4.6538	.00706	.19721	.73142	.00440
#4	1.0051	.00115	4.6719	.00707	.20520	.88845	.00440
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14.980	.08022	.00126	S3552.1	.01344	4.7525	.02443
SDev	.067	.00057	.00402	.8	.01203	.0352	.02958
%RSD	.44748	.70877	318.77	.02246	89.534	.74143	121.08
#1	15.077	.07973	.00126	S3550.9	.01336	4.7657	.00350
#2	14.975	.08071	-.00366	S3552.6	.00207	4.7961	.02425
#3	14.932	.07973	.00126	S3552.5	.00822	4.7277	.00365
#4	14.937	.08071	.00619	S3552.3	.03010	4.7204	.06631
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0260	4.4692	-.00087	.55209	-.00254	.01882	-.00049
SDev	.0219	.0290	.01707	.00478	.00062	.06207	.00007
%RSD	2.1367	.64790	1972.1	.86504	24.425	329.88	14.381
#1	1.0338	4.4836	.02010	.55836	-.00344	-.00747	-.00049
#2	1.0299	4.4836	-.01474	.54780	-.00213	-.05418	-.00055

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#3	1.0456	4.4836	-.01483	.55318	-.00246	.05100	-.00052
#4	.99466	4.4257	.00601	.54900	-.00213	.08591	-.00039

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.04572
SDev	.00158
%RSD	3.4439

#1	.04699
#2	.04515
#3	.04700
#4	.04375

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHX47T

Operator: MTW

Run Time: 08/22/00 08:41:36

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00218	1.2473	.13205	.16078	1.0341	.00037	145.66
SDev	.00073	.0094	.02719	.00002	.0051	.00006	.64
%RSD	33.346	.75648	20.592	.00925	.49744	15.705	.44014
#1	-.00254	1.2428	.13597	.16076	1.0347	.00034	145.12
#2	-.00254	1.2393	.10125	.16078	1.0311	.00034	146.55
#3	-.00254	1.2463	.12435	.16079	1.0411	.00034	145.28
#4	-.00109	1.2608	.16661	.16077	1.0296	.00045	145.68
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00100	.00188	.00292	.01157	1.3175	1.8761	.00412
SDev	.00135	.00302	.00323	.00161	.0061	.5772	.00109
%RSD	135.05	160.27	110.56	13.932	.46207	30.767	26.478
#1	-.00114	.00188	-.00014	.00980	1.3097	1.7893	.00468
#2	-.00257	.00328	.00571	.01245	1.3224	2.0620	.00385
#3	-.00103	-.00231	.00040	.01068	1.3224	1.1364	.00272
#4	.00074	.00467	.00571	.01333	1.3157	2.5166	.00523
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.893	.11052	-.00103	S2663.7	.00924	.01419	.02878
SDev	.026	.00081	.00493	1775.9	.00462	.02589	.01972
%RSD	.16565	.72805	476.21	66.670	49.951	182.42	68.536
#1	15.877	.10954	.00143	S3552.3	.00611	.00473	.04177
#2	15.928	.11151	.00143	S3552.1	.00885	.03512	.04183
#3	15.899	.11053	.00143	S-.13566	.00611	-.01816	.03139
#4	15.869	.11052	-.00842	S3550.4	.01589	.03509	.00012
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01514	7.5835	.00081	.55448	.02441	.07454	.00608
SDev	.01449	.0358	.02027	.00268	.00046	.01650	.00235
%RSD	95.697	.47227	2503.0	.48412	1.8983	22.137	38.589
#1	-.02887	7.5531	.02039	.55381	.02375	.07462	.00490
#2	-.00925	7.6342	-.01454	.55329	.02474	.08617	.00491

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#3	-.02492	7.5647	-.01870	.55841	.02474	.05118	.00490
#4	.00249	7.5821	.01608	.55240	.02441	.08619	.00960

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.11945
SDev	.00270
%RSD	2.2643

#1	.11826
#2	.11801
#3	.11803
#4	.12350

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: CCV2-1 0057-025-5 Operator: MTW
 Run Time: 08/22/00 08:44:49
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0015	49.842	5.0612	4.9896	4.9300	4.9947	51.232
SDev	.0027	.074	.0409	.0106	.0065	.0072	.094
%RSD	.27197	.14863	.80767	.21255	.13084	.14344	.18415
#1	1.0033	49.876	5.0744	4.9843	4.9293	5.0014	51.257
#2	.99759	49.801	5.0713	5.0055	4.9316	4.9889	51.127
#3	1.0034	49.928	5.0969	4.9839	4.9373	5.0003	51.349
#4	1.0018	49.764	5.0023	4.9848	4.9218	4.9881	51.196
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.1059	5.0239	5.0067	4.9318	51.877	49.555	4.9250
SDev	.0217	.0135	.0081	.0055	.085	.241	.0111
%RSD	.42424	.26827	.16166	.11232	.16332	.48576	.22497
#1	5.1327	5.0235	5.0162	4.9300	51.892	49.633	4.9229
#2	5.1058	5.0152	4.9965	4.9362	51.820	49.774	4.9406
#3	5.1055	5.0431	5.0082	4.9362	51.991	49.600	4.9217
#4	5.0797	5.0139	5.0061	4.9247	51.806	49.212	4.9145
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	49.975	5.0160	5.0231	49.288	4.9909	5.0595	5.0415
SDev	.053	.0057	.0166	.063	.0324	.0361	.0521
%RSD	.10594	.11310	.33006	.12715	.64858	.71389	1.0335
#1	49.949	5.0175	5.0281	49.325	5.0158	5.0197	5.0808
#2	50.029	5.0116	5.0034	49.306	4.9742	5.0725	4.9659
#3	50.008	5.0234	5.0182	49.326	4.9535	5.0429	5.0701
#4	49.914	5.0116	5.0428	49.195	5.0200	5.1030	5.0494
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.1847	5.0602	5.0664	4.9537	4.9618	10.137	5.0069
SDev	.0602	.0330	.0274	.0084	.0060	.116	.0095
%RSD	1.1606	.65230	.53993	.17021	.12144	1.1466	.18955
#1	5.1661	5.0399	5.0630	4.9546	4.9649	10.306	5.0094
#2	5.1659	5.0457	5.0460	4.9579	4.9600	10.062	5.0077

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#3	5.2721	5.1095	5.0506	4.9606	4.9679	10.060	5.0165
#4	5.1345	5.0455	5.1060	4.9416	4.9541	10.120	4.9938

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem	ZN
Units	ppm
Avge	4.9927
SDev	.0016
%RSD	.03170

#1	4.9935
#2	4.9904
#3	4.9929
#4	4.9939

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB1

Operator: MTW

Run Time: 08/22/00 08:47:57

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00073	.00175	.01827	.00066	.00063	.00031	.00501
SDev	.00082	.00337	.02994	.00257	.00048	.00029	.00236
%RSD	113.39	192.71	163.87	390.39	76.594	91.470	47.155
#1	.00000	.00133	.02024	-.00104	.00101	.00073	.00587
#2	.00002	-.00049	.05492	-.00106	.00050	.00021	.00369
#3	.00143	-.00048	-.01833	.00035	.00000	.00010	.00258
#4	.00145	.00663	.01626	.00439	.00101	.00021	.00791
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00044	-.00070	.00186	-.00022	.00183	.08058	-.00037
SDev	.00184	.00238	.00205	.00044	.00319	.15260	.00013
%RSD	418.71	339.92	110.37	200.22	174.34	189.37	34.941
#1	.00100	-.00035	.00306	.00000	.00616	-.07025	-.00028
#2	.00232	.00244	.00252	.00000	.00017	.26860	-.00028
#3	.00053	-.00175	-.00120	-.00000	-.00117	.13637	-.00056
#4	-.00208	-.00314	.00305	-.00088	.00217	-.01240	-.00036
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00536	.00049	.00000	.01062	.00307	.00188	.00262
SDev	.01440	.00057	.00246	.00614	.00616	.00757	.00519
%RSD	268.87	115.50	899140.	57.872	200.88	402.26	198.40
#1	.00067	.00099	.00123	.00916	.00439	-.00189	.01040
#2	-.01272	.00000	.00123	.00425	-.00479	-.00183	.00001
#3	.01406	.00098	.00123	.01006	.01014	.01323	.00007
#4	.01941	-.00000	-.00369	.01900	.00253	-.00199	-.00002
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00294	.01161	.00617	.00027	.00041	-.02922	.00244
SDev	.03052	.00292	.02045	.00035	.00049	.02694	.00279
%RSD	1036.8	25.112	331.13	127.60	120.00	92.178	114.27
#1	-.01272	.00724	.02213	.00077	.00082	-.00589	.00003
#2	.03036	.01309	-.02311	.00025	.00016	-.00589	.00490

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#3	-.03232	.01303	.00770	.00003	-.00016	-.05252	.00002
#4	.02645	.01309	.01797	.00003	.00082	-.05258	.00481

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00014
SDev	.00104
%RSD	755.78

#1	.00097
#2	.00103
#3	-.00036
#4	-.00109

Errors	LC Pass
High	.02000
Low	-.02000

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Method: QUANMET Sample Name: DHX4AT

Operator: MTW

Run Time: 08/22/00 08:51:05

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00130	.63098	.14566	.37822	.94661	.00038	108.89
SDev	.00203	.01080	.02117	.00001	.00686	.00013	.65
%RSD	156.06	1.7108	14.537	.00169	.72524	33.153	.59690
#1	.00014	.62025	.17272	.37822	.93701	.00047	109.33
#2	.00012	.64348	.14946	.37822	.94656	.00048	108.93
#3	-.00128	.63630	.12241	.37823	.95028	.00021	109.33
#4	-.00417	.62391	.13804	.37821	.95259	.00035	107.95
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00005	.00021	.00585	.02958	.58767	1.7211	.00299
SDev	.00182	.00175	.00580	.00051	.00258	.2032	.00041
%RSD	3900.4	822.31	99.120	1.7241	.43901	11.804	13.657
#1	.00062	.00057	.01422	.03002	.58867	2.0207	.00242
#2	-.00225	-.00222	.00465	.02914	.58668	1.5744	.00300
#3	.00209	.00055	.00359	.02914	.59067	1.6653	.00319
#4	-.00029	.00196	.00093	.03002	.58467	1.6240	.00335
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	16.157	.11451	.00378	S-.13566	.00659	.16265	.03131
SDev	.041	.00094	.00284	.00000	.00792	.00376	.03716
%RSD	.25262	.82349	75.196	.00000	120.16	2.3142	118.69
#1	16.099	.11426	.00132	S-.13566	.01393	.16461	.06271
#2	16.166	.11525	.00624	S-.13566	.01294	.16442	-.01043
#3	16.196	.11525	.00625	S-.13566	-.00011	.15701	.06257
#4	16.166	.11328	.00132	S-.13566	-.00041	.16457	.01038
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01216	5.7043	.00898	.48750	.00369	.03543	.00252
SDev	.03421	.0319	.01540	.00340	.00062	.09678	.00282
%RSD	281.27	.55873	171.56	.69785	16.826	273.17	111.89
#1	-.01118	5.6884	-.01040	.48274	.00377	.14049	.00493
#2	-.05820	5.6883	.00364	.48744	.00410	.05883	.00013

.669.890

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#3	.02408	5.7521	.02248	.48953	.00410	-.09307	.00500
#4	-.00336	5.6883	.02018	.49031	.00278	.03546	.00003
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.08803
SDev	.00196
%RSD	2.2269

#1	.08637
#2	.09085
#3	.08774
#4	.08717

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DJ0QLT

Operator: MTW

Run Time: 08/22/00 08:54:13

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00182	8.2403	.18491	.31461	2.3461	.00068	448.37
SDev	.00072	.0126	.03453	.00169	.0037	.00006	2.00
%RSD	39.565	.15314	18.673	.53809	.15904	8.4282	.44675
#1	-.00220	8.2484	.22255	.31374	2.3480	.00059	446.06
#2	-.00217	8.2304	.14154	.31377	2.3437	.00071	448.96
#3	-.00217	8.2286	.17632	.31715	2.3422	.00071	447.69
#4	-.00074	8.2536	.19923	.31379	2.3503	.00071	450.79
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07007	.01702	.04001	1.0808	4.4301	3.8431	.01112
SDev	.00507	.00179	.00240	.0011	.0163	.3624	.00041
%RSD	7.2315	10.521	5.9919	.10530	.36714	9.4305	3.7014
#1	.06304	.01495	.03868	1.0821	4.4181	3.3017	.01107
#2	.06968	.01772	.03815	1.0804	4.4354	4.0042	.01123
#3	.07370	.01632	.04347	1.0795	4.4161	4.0703	.01159
#4	.07385	.01910	.03975	1.0813	4.4507	3.9960	.01060
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.8869	2.1057	.01174	S-.13566	.03257	16.830	.15651
SDev	.0113	.0070	.00402	.00000	.00234	.053	.02258
%RSD	.12665	.33387	34.259	.00000	7.1911	.31325	14.428
#1	8.8748	2.1002	.00682	S-.13566	.03173	16.768	.18786
#2	8.8802	2.1032	.01175	S-.13566	.03171	16.829	.15648
#3	8.8935	2.1032	.01174	S-.13566	.03081	16.829	.13557
#4	8.8989	2.1160	.01667	S-.13566	.03602	16.897	.14611
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.02751	11.937	.02703	1.2766	.06290	.03307	.00884
SDev	.05351	.031	.01475	.0019	.00112	.04900	.00250
%RSD	194.53	.26288	54.583	.14820	1.7790	148.20	28.324
#1	-.04027	11.914	.02152	1.2772	.06307	.05364	.00508
#2	-.02455	11.925	.04603	1.2759	.06241	-.04000	.01005

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#3	-.08729	11.925	.02950	1.2745	.06176	.05363	.01006
#4	.04209	11.983	.01105	1.2789	.06438	.06500	.01015
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	30.955
SDev	.102
%RSD	.33103

#1	30.871
#2	30.954
#3	30.895
#4	31.099

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

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Method: QUANMET Sample Name: DHWJHBT Operator: MTW
 Run Time: 08/22/00 08:57:21
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00071	.00401	.01151	.00273	.00000	.00000	.02700
SDev	.00143	.00470	.02053	.01727	.00024	.00006	.00428
%RSD	201.71	117.34	178.29	633.41	.00000	8047.9	15.835
#1	.00143	.00495	-.01841	-.00784	.00030	-.00003	.03338
#2	-.00142	.01021	.01628	.02837	-.00030	-.00003	.02430
#3	-.00142	.00135	.02021	-.00723	.00000	.00010	.02495
#4	-.00143	-.00047	.02797	-.00240	.00000	-.00003	.02537
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK
High	.50000		.50000		10.000		
Low	-.50000		-.50000		-10.000		
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00004	-.00139	.00279	-.00022	.03029	.19215	-.00059
SDev	.00307	.00070	.00053	.00084	.00137	.37135	.00080
%RSD	8029.7	49.840	19.075	385.21	4.5293	193.26	136.55
#1	.00144	-.00035	.00306	.00088	.03012	.73968	-.00012
#2	.00273	-.00175	.00306	.00000	.02879	.06198	-.00036
#3	-.00433	-.00173	.00199	-.00088	.03212	-.08678	-.00177
#4	.00000	-.00175	.00306	-.00088	.03012	.05372	-.00009
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.10000		.50000				
Low	-.10000		-.50000				
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00134	.00025	.00000	.01587	-.00378	-.02279	.01034
SDev	.01057	.00049	.00472	.00787	.00290	.01140	.03074
%RSD	789.51	193.60	104120.	49.597	76.787	50.015	297.37
#1	.01138	.00001	-.00369	.02749	.00009	-.01702	.05210
#2	.00335	.00099	.00616	.01274	-.00575	-.00954	-.00016
#3	-.01004	.00001	-.00369	.01319	-.00624	-.03233	-.02098
#4	-.01004	.00001	.00124	.01006	-.00321	-.03228	.01039
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						.50000	
Low						-.50000	
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00106	-.02896	.01957	-.00013	-.00074	-.04117	-.00030
SDev	.02686	.03185	.02544	.00011	.00031	.01652	.00060
%RSD	2535.4	109.97	129.99	82.283	42.552	40.124	200.61
#1	-.01657	.00145	.05315	-.00012	-.00049	-.06453	-.00007
#2	.03436	-.05646	.01798	-.00012	-.00082	-.02947	.00013

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#3	-.02440	-.05646	.01583	-.00001	-.00115	-.02951	-.00007
#4	.01085	-.00436	-.00868	-.00027	-.00049	-.04116	-.00119

Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.25000						
Low	-.25000						

Elem	ZN
Units	ppm
Avge	.00297
SDev	.00113
%RSD	37.900

#1	.00175
#2	.00232
#3	.00419
#4	.00363

Errors	NOCHECK
High	
Low	

Method: QUANMET Sample Name: DHVOKBT Operator: MTW
 Run Time: 08/22/00 09:00:29
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00108	.02187	.14162	.02849	.00055	.00006	.15774
SDev	.00136	.00558	.09059	.00774	.00033	.00012	.00249
%RSD	125.96	25.510	63.970	27.181	59.767	192.49	1.5807
#1	.00000	.01740	.21307	.03517	.00050	-.00003	.15967
#2	.00003	.02094	.09718	.02250	.00050	.00021	.15823
#3	.00286	.02995	.03544	.03518	.00101	.00010	.15897
#4	.00143	.01918	.22078	.02110	.00021	-.00003	.15411
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK
High	.50000		.50000		10.000		
Low	-.50000		-.50000		-10.000		
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00224	-.00069	.00213	.00198	.01298	.41736	-.00031
SDev	.00230	.00176	.00201	.00085	.00167	.35854	.00076
%RSD	102.75	253.92	94.323	42.620	12.823	85.905	245.91
#1	-.00465	.00106	.00253	.00265	.01282	.66530	-.00141
#2	-.00298	-.00034	.00465	.00265	.01348	.75621	.00008
#3	.00084	-.00035	.00146	.00176	.01481	.26034	.00030
#4	-.00216	-.00314	-.00013	.00088	.01082	-.01240	-.00020
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.10000		.50000				
Low	-.10000		-.50000				
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03414	.00099	.00246	.65862	.00241	.01138	.02609
SDev	.00346	.00000	.00246	.00925	.00536	.01684	.03014
%RSD	10.125	.09429	99.921	1.4040	222.40	147.94	115.51
#1	.03548	.00099	.00616	.67069	.00226	.02087	-.01045
#2	.03816	.00099	.00123	.65907	-.00231	.02847	.03120
#3	.03280	.00099	.00123	.65639	.00994	.00569	.02095
#4	.03012	.00099	.00123	.64834	-.00025	-.00950	.06266
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						.50000	
Low						-.50000	
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.03523	.00002	.00629	.00077	-.00000	.01155	.00127
SDev	.01295	.00557	.02263	.00000	.00019	.03632	.00243
%RSD	36.754	35576.	359.84	.00000	217e6	314.55	190.89
#1	-.05188	.00145	-.01289	.00077	.00016	-.04101	.00012
#2	-.03229	.00730	.03867	.00077	-.00016	.02903	.00491

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#3	-.02053	-.00434	.00370	.00077	.00016	.01737	.00003
#4	-.03621	-.00434	-.00433	.00077	-.00016	.04079	.00002

Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.25000						
Low	-.25000						

Elem	ZN
Units	ppm
Avge	.00268
SDev	.00173
%RSD	64.488

#1	.00306
#2	.00100
#3	.00172
#4	.00493

Errors	NOCHECK
High	
Low	

Method: QUANMET Sample Name: DHWJHCT

Operator: MTW

Run Time: 08/22/00 09:03:37

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04832	1.9434	2.2662	.97589	2.0222	.05098	L.18267
SDev	.00203	.0128	.0433	.00711	.0126	.00024	.00239
%RSD	4.2034	.65913	1.9105	.72837	.62175	.47351	1.3092

#1	.04686	1.9305	2.2953	.96567	2.0094	.05084	L.18083
#2	.04691	1.9392	2.2025	.98138	2.0232	.05094	L.18222
#3	.05119	1.9428	2.2758	.97996	2.0171	.05081	L.18616
#4	.04832	1.9609	2.2911	.97656	2.0391	.05133	L.18148

Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Low
High	.06000	2.4000	2.4000		2.4000	.06000	60.000
Low	.04000	1.6000	1.6000		1.6000	.04000	40.000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04403	.49409	.20139	.25004	1.0638	L.33265	.97232
SDev	.00475	.00440	.00159	.00072	.0096	.35939	.00542
%RSD	10.782	.89132	.79145	.28826	.90160	108.04	.55738

#1	L.03936	.48993	.19953	.24915	1.0527	L.05372	.96679
#2	.04796	.49129	.20272	.25092	1.0646	L.45042	.97522
#3	.04052	.49550	.20272	.25004	1.0620	L.78927	.96885
#4	.04829	.49966	.20059	.25004	1.0760	L.03719	.97841

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	NOCHECK
High	.06000	.60000	.24000	.30000	1.2000	60.000	
Low	.04000	.40000	.16000	.20000	.80000	40.000	

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	L.04284	.49677	.00508	L.66946	.49735	.47698	L.01965
SDev	.00962	.00259	.00472	.00539	.01319	.00755	.02309
%RSD	22.462	.52122	92.744	.80559	2.6520	1.5838	117.52

#1	L.03548	.49406	.00139	L.66354	.48665	.48069	L.03785
#2	L.04084	.49505	.00632	L.66667	.51307	.48065	L-.01420
#3	L.05690	.49899	.01124	L.67561	.50343	.46565	L.02750
#4	L.03816	.49899	.00139	L.67203	.48624	.48092	L.02744

Errors	LC Low	LC Pass	NOCHECK	LC Low	LC Pass	LC Pass	LC Low
High	60.000	.60000		60.000	.60000	.60000	.60000
Low	40.000	.40000		40.000	.40000	.40000	.40000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.2477	.01928	.02135	1.0174	.00016	1.9375	.48957
SDev	.0471	.00814	.01059	.0060	.00038	.0911	.00467
%RSD	2.0972	42.235	49.580	.59327	230.94	4.6998	.95469

#1	2.2897	.03078	.00808	1.0116	-.00016	1.8121	.48310
#2	2.2624	.01353	.03249	1.0162	.00049	2.0104	.49295

#3	2.2584	.01932	.02652	1.0160	.00049	1.9988	.49305
#4	2.1801	.01348	.01831	1.0259	-.00016	1.9286	.48920
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass
High	2.4000					2.4000	.60000
Low	1.6000					1.6000	.40000
Elem	ZN						
Units	ppm						
Avge	.47283						
SDev	.00387						
%RSD	.81890						
#1	.46816						
#2	.47183						
#3	.47395						
#4	.47740						
Errors	LC Pass						
High	.60000						
Low	.40000						

Method: QUANMET Sample Name: CCV2-2

Operator: MTW

Run Time: 08/22/00 09:06:51

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0087	50.317	5.1946	5.0632	5.0164	5.0814	51.684
SDev	.0015	.197	.0313	.0364	.0298	.0181	.119
%RSD	.15032	.39218	.60185	.71951	.59431	.35529	.23013
#1	1.0094	50.246	5.2126	5.0293	5.0135	5.0841	51.695
#2	1.0095	50.413	5.2263	5.0991	5.0322	5.0947	51.832
#3	1.0065	50.078	5.1836	5.0345	4.9758	5.0552	51.668
#4	1.0095	50.531	5.1561	5.0901	5.0440	5.0917	51.542
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.1324	5.0726	5.0562	4.9923	52.514	50.305	4.9653
SDev	.0223	.0202	.0126	.0265	.114	.383	.0343
%RSD	.43365	.39738	.24944	.53012	.21711	.76053	.69022
#1	5.1081	5.0681	5.0624	4.9900	52.525	50.220	4.9681
#2	5.1408	5.0987	5.0709	5.0042	52.638	50.361	4.9709
#3	5.1590	5.0499	5.0454	4.9565	52.361	49.856	4.9197
#4	5.1216	5.0736	5.0459	5.0183	52.531	50.782	5.0027
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	50.483	5.0671	5.0663	50.001	5.0821	5.0815	5.1514
SDev	.143	.0097	.0130	.320	.0176	.0252	.0514
%RSD	.28372	.19241	.25589	.64064	.34564	.49626	.99830
#1	50.434	5.0659	5.0528	49.948	5.0743	5.0815	5.1958
#2	50.581	5.0787	5.0774	50.116	5.1084	5.1124	5.1019
#3	50.303	5.0550	5.0577	49.589	5.0716	5.0506	5.1122
#4	50.613	5.0689	5.0774	50.350	5.0743	5.0814	5.1958
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.2774	5.1289	5.1896	5.0313	5.0183	10.191	5.0623
SDev	.0557	.0378	.0403	.0261	.0163	.112	.0141
%RSD	1.0545	.73638	.77689	.51955	.32568	1.0993	.27946
#1	5.3127	5.1159	5.1662	5.0305	5.0213	10.171	5.0612
#2	5.3326	5.1103	5.2500	5.0440	5.0282	10.053	5.0751

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#3	5.2535	5.1851	5.1720	4.9952	4.9944	10.219	5.0430
#4	5.2109	5.1044	5.1703	5.0554	5.0295	10.322	5.0701

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem	ZN
Units	ppm
Avge	4.9880
SDev	.0157
%RSD	.31566

#1	4.9952
#2	4.9988
#3	4.9933
#4	4.9646

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB2

Operator: MTW

Run Time: 08/22/00 09:09:59

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00071	.01026	-.01842	.01855	.00018	.00029	.00359
SDev	.00082	.00666	.04197	.00366	.00047	.00007	.00078
%RSD	115.39	64.862	227.89	19.737	267.36	25.660	21.882
#1	.00143	.00318	.03568	.01362	.00021	.00022	.00309
#2	.00000	.01029	-.00684	.01905	.00050	.00022	.00476
#3	.00000	.00842	-.04542	.02248	-.00050	.00035	.00318
#4	.00143	.01917	-.05708	.01906	.00050	.00035	.00332
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00316	.00069	.00306	.00066	.00000	.61985	-.00029
SDev	.00317	.00239	.00130	.00044	.00064	.23891	.00042
%RSD	100.26	346.86	42.598	66.827	223830.	38.544	145.97
#1	.00344	.00104	.00252	.00088	-.00050	.47522	-.00028
#2	-.00141	.00384	.00412	.00089	-.00050	.80580	-.00039
#3	H.00524	-.00176	.00146	-.00000	.00016	.35951	.00027
#4	H.00538	-.00036	.00412	.00088	.00083	.83886	-.00075
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00536	.00049	.00369	.00291	-.00369	.00573	.01558
SDev	.00987	.00057	.00493	.00533	.00360	.03608	.02489
%RSD	184.28	115.41	133.33	183.33	97.601	630.10	159.70
#1	-.00736	-.00000	-.00369	-.00201	.00166	-.01700	.03133
#2	.01674	.00099	.00616	.00469	-.00610	-.01698	-.01053
#3	.00602	.00000	.00616	-.00067	-.00484	-.00189	.04168
#4	.00602	.00099	.00616	.00961	-.00548	.05878	-.00014
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00588	-.01158	.00264	-.00012	.00008	-.02628	.00008
SDev	.03524	.03004	.00976	.00037	.00062	.05984	.00010
%RSD	599.72	259.41	369.64	309.86	757.19	227.72	123.86
#1	-.00882	.00724	.00990	-.00038	.00049	-.08758	-.00007
#2	-.03624	.00145	-.01084	-.00049	.00016	-.05257	.00013

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#3	.02645	.00145	.00174	.00014	-.00082	.05256	.00012
#4	.04212	-.05646	.00976	.00025	.00049	-.01752	.00013
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00067
SDev	.00181
%RSD	270.92

#1	.00020
#2	.00255
#3	-.00163
#4	.00154

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHKQ4T

Operator: MTW

Run Time: 08/22/00 09:13:06

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00166	.06241	.42035	.43256	.82330	.00018	H892.56
SDev	.00073	.00336	.08012	.00000	.00271	.00001	.83
%RSD	43.688	5.3815	19.060	.00029	.32866	3.8139	.09351
#1	-.00275	.06204	.45515	.43256	.82252	.00019	H892.62
#2	-.00130	.06025	.51683	.43256	.81980	.00017	H893.02
#3	-.00130	.06727	.36239	.43256	.82553	.00017	H893.22
#4	-.00130	.06009	.34701	.43256	.82533	.00017	H891.36
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00214	.00421	.00052	.05470	.39658	10.798	.00878
SDev	.00227	.00181	.00067	.00072	.00191	.209	.00026
%RSD	106.19	42.888	127.83	1.3150	.48215	1.9353	2.9873
#1	-.00124	.00212	.00039	.05469	.39408	10.632	.00861
#2	L-.00542	.00632	.00145	.05382	.39874	11.087	.00861
#3	-.00020	.00351	.00039	.05470	.39675	10.814	.00917
#4	-.00171	.00491	-.00014	.05558	.39674	10.657	.00872
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.5157	.33210	.00252	186.51	.00133	.01709	.02619
SDev	.0197	.00057	.00739	.66	.00519	.02354	.02623
%RSD	.30200	.17097	292.95	.35178	390.38	137.74	100.16
#1	6.5318	.33160	-.00364	186.55	.00438	.03597	.00010
#2	6.4889	.33259	-.00363	185.62	.00706	.02852	.02112
#3	6.5291	.33259	.00622	186.67	-.00328	.02085	.02089
#4	6.5130	.33161	.01114	187.20	-.00285	-.01698	.06266
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00385	H29.018	.04097	.47362	L-.05398	-.01115	.01833
SDev	.02499	.014	.01653	.00112	.00016	.10330	.00252
%RSD	648.61	.04747	40.355	.23564	.30349	926.76	13.746
#1	-.00778	H29.027	.05112	.47342	L-.05389	-.05487	.01456
#2	.03141	H29.027	.01629	.47212	L-.05389	-.06666	.01943

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#3	-.01169	H29.021	.04711	.47447	L-.05389	.14358	.01962
#4	-.02736	H28.998	.04936	.47447	L-.05422	-.06663	.01972

Errors	LC Pass	LC High	LC Pass	LC Pass	LC Low	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.03257
SDev	.00218
%RSD	6.6876

#1	.03026
#2	.03369
#3	.03504
#4	.03131

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DHKQ4P5T

Operator: MTW

Run Time: 08/22/00 09:16:19

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00140	.01383	.10970	.06628	.16877	.00011	186.25
SDev	.00233	.00637	.05048	.00230	.00658	.00012	7.21
%RSD	166.81	46.042	46.013	3.4736	3.8971	106.56	3.8707
#1	-.00425	.01378	.13189	.06548	.17671	-.00004	194.07
#2	-.00140	.01742	.14730	.06407	.17098	.00008	189.54
#3	.00146	.01921	.03536	.06949	.16595	.00021	184.03
#4	-.00140	.00490	.12425	.06606	.16143	.00021	177.36
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00011	.00273	-.00067	.01125	.08151	2.4443	.00011
SDev	.00190	.00209	.00150	.00085	.00345	.1561	.00084
%RSD	1781.4	76.763	225.45	7.5126	4.2359	6.3879	762.77
#1	-.00205	-.00041	-.00279	.01059	.08400	2.2273	-.00075
#2	-.00078	.00377	-.00067	.01147	.08401	2.4339	-.00028
#3	-.00005	.00377	.00040	.01235	.08135	2.5496	.00027
#4	.00246	.00377	.00040	.01059	.07668	2.5662	.00121
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.3550	.07085	.00124	36.992	.00742	.00954	.01054
SDev	.0556	.00311	.00000	1.470	.00567	.03126	.00854
%RSD	4.1025	4.3918	.04152	3.9732	76.434	327.49	81.084
#1	1.4092	.07380	.00124	38.814	.01480	.02842	.01061
#2	1.3931	.07282	.00124	37.450	.00342	-.01700	.00004
#3	1.3262	.06986	.00124	36.270	.00254	.04371	.01054
#4	1.2914	.06691	.00124	35.433	.00891	-.01696	.02096
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.03896	5.8650	.01038	.09743	-.01147	.02286	.00490
SDev	.03436	.2261	.01604	.00385	.00068	.04813	.00000
%RSD	88.181	3.8542	154.53	3.9513	5.9476	210.60	.06061
#1	-.05169	6.1169	.01192	.10204	-.01229	.02871	.00489
#2	-.06736	5.9663	.02009	.09891	-.01163	.02867	.00490

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#3	.01099	5.7810	-.01274	.09551	-.01065	.07539	.00490
#4	-.04779	5.5957	.02224	.09327	-.01130	-.04135	.00490
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00732
SDev	.00130
%RSD	17.733

#1	.00803
#2	.00752
#3	.00543
#4	.00828

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHKQ4ST Operator: MTW
 Run Time: 08/22/00 09:19:40
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.90487	.05574	5.3692	.41451	38.658	.00018	H809.10
SDev	.00243	.00237	.0073	.00327	.074	.00001	1.75
%RSD	.26876	4.2473	.13675	.78967	.19171	3.4066	.21656
#1	.90237	.05661	5.3644	.41196	38.624	.00018	H806.77
#2	.90807	.05852	5.3683	.41194	38.734	.00019	H811.02
#3	.90522	.05301	5.3799	.41537	38.571	.00019	H809.41
#4	.90381	.05481	5.3643	.41879	38.703	.00017	H809.18
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.95256	.00455	4.5387	.04874	.34984	9.6738	.00794
SDev	.00444	.00236	.0119	.00132	.00275	.2892	.00072
%RSD	.46599	51.923	.26187	2.7163	.78493	2.9898	9.1062
#1	.95437	.00421	4.5235	.04764	.35283	9.3762	.00704
#2	.95173	.00556	4.5522	.05029	.34751	10.046	.00881
#3	.95730	.00144	4.5374	.04764	.34750	9.5333	.00787
#4	.94684	.00698	4.5416	.04941	.35150	9.7399	.00804
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.9326	.29963	.00375	169.33	.01394	3.8309	.04910
SDev	.0380	.00057	.00493	.40	.00500	.0520	.01568
%RSD	.63979	.18919	131.48	.23895	35.823	1.3587	31.941
#1	5.8864	.29914	.00621	169.01	.01777	3.8100	.05713
#2	5.9721	.30011	-.00364	169.69	.00687	3.8480	.05678
#3	5.9185	.29913	.00621	168.95	.01398	3.7720	.02558
#4	5.9534	.30012	.00621	169.67	.01715	3.8936	.05692
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.97154	H26.352	.02512	.42527	-.04726	.00961	.01545
SDev	.02966	.096	.01603	.00081	.00041	.03878	.00235
%RSD	3.0528	.36438	63.815	.18966	.87231	403.65	15.202
#1	.95196	H26.218	.00204	.42473	-.04669	-.01962	.01516
#2	1.0146	H26.432	.03492	.42614	-.04734	.01548	.01381

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#3	.96761	H26.351	.02655	.42446	-.04767	.06221	.01397
#4	.95195	H26.409	.03697	.42577	-.04734	-.01964	.01886

Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.03184
SDev	.00107
%RSD	3.3593

#1	.03080
#2	.03291
#3	.03104
#4	.03259

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DHKQ4DT Operator: MTW
 Run Time: 08/22/00 09:22:53
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.92557	.05888	5.4608	.41114	48.932	.00015	H820.67
SDev	.00215	.00594	.0240	.00171	.317	.00006	2.53
%RSD	.23181	10.082	.43898	.41531	.64688	41.007	.30797
#1	.92807	.05488	5.4493	.40858	48.951	.00019	H819.50
#2	.92666	.05477	5.4955	.41199	49.215	.00017	H823.59
#3	.92378	.05848	5.4416	.41199	49.077	.00019	H817.83
#4	.92378	.06741	5.4569	.41200	48.486	.00006	H821.78
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.96405	.00491	4.6192	.04941	.37413	9.9134	.00858
SDev	.00568	.00068	.0142	.00072	.00144	.1366	.00096
%RSD	.58887	13.804	.30716	1.4561	.38495	1.3783	11.131
#1	.97071	.00453	4.6171	.05029	.37547	10.004	.00806
#2	.96173	.00442	4.6395	.04941	.37213	9.7233	.00994
#3	.95754	.00590	4.6065	.04853	.37413	9.9052	.00779
#4	.96620	.00478	4.6139	.04941	.37480	10.021	.00853
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.0230	.30357	.00252	172.60	.00719	4.7186	.03533
SDev	.0460	.00057	.00246	1.44	.00854	.0226	.02255
%RSD	.76318	.18723	97.771	.83521	118.82	.47980	63.834
#1	5.9828	.30406	.00129	172.50	.01311	4.6902	.05635
#2	6.0846	.30406	.00621	173.76	-.00492	4.7281	.03506
#3	6.0310	.30307	.00129	173.53	.00726	4.7433	.00411
#4	5.9935	.30307	.00129	170.60	.01331	4.7129	.04580
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0970	H26.684	.02455	.43745	-.04759	.05317	.01528
SDev	.0413	.054	.02565	.00258	.00068	.04707	.00251
%RSD	3.7681	.20098	104.50	.58893	1.4193	88.538	16.437
#1	1.0460	H26.670	-.00206	.43763	-.04701	.02689	.01404
#2	1.1244	H26.762	.01839	.43946	-.04832	.01522	.01905

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#3	1.1361	H26.641	.02235	.43894	-.04800	.05025	.01401
#4	1.0813	H26.664	.05952	.43376	-.04701	.12031	.01403

Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.03152
SDev	.00170
%RSD	5.4096

#1	.03180
#2	.02956
#3	.03106
#4	.03367

Errors	LC Pass
High	100.00
Low	-.02000

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Analysis Report

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Method: QUANMET Sample Name: CCV2-3

Operator: MTW

Run Time: 08/22/00 09:26:06

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem Units	AG ppm	AL ppm	AS ppm	B_ ppm	BA ppm	BE ppm	CA ppm
Avge	1.0051	50.149	5.0901	5.0279	4.9928	5.0640	51.721
SDev	.0012	.063	.0884	.0099	.0108	.0039	.095
%RSD	.11755	.12544	1.7370	.19775	.21688	.07619	.18382
#1	1.0051	50.114	4.9898	5.0141	4.9855	5.0664	51.833
#2	1.0036	50.182	5.0629	5.0270	5.0002	5.0636	51.617
#3	1.0065	50.080	5.1060	5.0351	4.9817	5.0587	51.761
#4	1.0051	50.218	5.2015	5.0352	5.0038	5.0673	51.672
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000
Elem Units	CD ppm	CO ppm	CR ppm	CU ppm	FE ppm	K_ ppm	LI ppm
Avge	5.1411	5.0754	5.0479	4.9713	52.439	49.929	4.9320
SDev	.0179	.0142	.0086	.0082	.049	.025	.0076
%RSD	.34746	.28009	.17089	.16532	.09315	.04943	.15438
#1	5.1581	5.0834	5.0465	4.9627	52.482	49.956	4.9273
#2	5.1165	5.0541	5.0363	4.9724	52.378	49.898	4.9298
#3	5.1490	5.0806	5.0534	4.9680	52.422	49.923	4.9277
#4	5.1408	5.0834	5.0555	4.9821	52.475	49.939	4.9433
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem Units	MG ppm	MN ppm	MO ppm	NA ppm	NI ppm	PB ppm	SB ppm
Avge	50.412	5.0622	5.0639	50.108	5.0727	5.0797	5.0888
SDev	.050	.0052	.0352	.084	.0415	.0211	.0051
%RSD	.09871	.10243	.69416	.16678	.81800	.41501	.10064
#1	50.394	5.0649	5.1070	50.036	5.1055	5.1046	5.0916
#2	50.361	5.0550	5.0232	50.159	5.0325	5.0658	5.0914
#3	50.479	5.0669	5.0725	50.038	5.1114	5.0893	5.0812
#4	50.415	5.0620	5.0528	50.199	5.0415	5.0590	5.0912
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000
Elem Units	SE ppm	SI ppm	SN ppm	SR ppm	TI ppm	TL ppm	V_ ppm
Avge	5.1597	5.1332	5.1472	5.0211	5.0028	10.186	5.0550
SDev	.0337	.0288	.0415	.0071	.0025	.262	.0055
%RSD	.65376	.56040	.80656	.14142	.05058	2.5747	.10785
#1	5.1441	5.1101	5.1329	5.0170	5.0026	10.556	5.0610
#2	5.2066	5.1158	5.1287	5.0258	5.0052	10.032	5.0520

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#3	5.1597	5.1737	5.2089	5.0133	4.9993	10.183	5.0579
#4	5.1285	5.1331	5.1185	5.0282	5.0039	9.9728	5.0490

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem	ZN
Units	ppm
Avge	4.9647
SDev	.0135
%RSD	.27278

#1	4.9616
#2	4.9562
#3	4.9847
#4	4.9564

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB3

Operator: MTW

Run Time: 08/22/00 09:29:13

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00036	-.00411	.02126	.00327	.00005	.00026	.00061
SDev	.00137	.00329	.04436	.00463	.00010	.00012	.00380
%RSD	383.87	80.180	208.66	141.54	200.00	47.871	619.18
#1	-.00143	-.00768	-.02985	.00095	.00000	.00010	-.00497
#2	.00000	-.00051	.07430	.00096	.00000	.00022	.00351
#3	-.00143	-.00596	.00487	.01022	.00021	.00035	.00166
#4	.00143	-.00228	.03571	.00096	.00000	.00035	.00226
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00174	-.00105	.00053	-.00044	.00017	.24794	-.00032
SDev	.00172	.00180	.00201	.00114	.00224	.32702	.00131
%RSD	98.870	170.99	375.95	258.04	1354.2	131.89	405.57
#1	.00026	-.00174	-.00119	-.00088	-.00250	-.01240	-.00224
#2	.00300	-.00036	.00253	-.00000	-.00050	.60745	.00038
#3	.00025	-.00314	-.00119	-.00177	.00083	-.04546	-.00009
#4	.00344	.00104	.00200	.00088	.00283	.44216	.00065
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00870	.00000	.00739	.00302	.00340	-.00191	.01306
SDev	.01126	.00000	.00246	.00660	.00435	.03670	.01779
%RSD	129.33	44.195	33.334	218.86	127.96	1926.4	136.30
#1	-.00736	.00000	.00616	.00425	.00746	-.03230	-.01039
#2	.00602	.00000	.00616	-.00648	.00062	-.01706	.01048
#3	-.02075	.00000	.01108	.00872	-.00122	-.00954	.02084
#4	-.01272	.00000	.00616	.00559	.00673	.05129	.03130
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01371	-.02751	-.00816	-.00020	-.00025	.00001	.00014
SDev	.03610	.03343	.02443	.00034	.00049	.09073	.00005
%RSD	263.25	121.55	299.47	167.99	200.00	1635700.	31.586
#1	.06562	.00145	-.00672	-.00049	-.00082	.02923	.00012
#2	-.01273	.00145	-.03745	-.00049	.00016	.04088	.00012

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#3	.01078	-.05646	-.01069	.00003	-.00049	.06424	.00021
#4	-.00881	-.05646	.02223	.00014	.00016	-.13433	.00012

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	-.00040
SDev	.00099
%RSD	249.90

#1	-.00035
#2	.00099
#3	-.00109
#4	-.00113

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DJ32CBE

Operator: MTW

Run Time: 08/22/00 09:45:41

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00214	.00805	-.01262	.01243	-.00002	.00016	.02108
SDev	.00184	.00472	.06015	.01419	.00027	.00007	.00251
%RSD	85.830	58.610	476.51	114.15	1204.3	47.034	11.911
#1	.00429	.01210	-.02616	.03174	-.00030	.00010	.02245
#2	.00001	.00312	-.08786	-.00245	-.00021	.00009	.01833
#3	.00286	.01208	.05489	.01021	.00021	.00022	.02384
#4	.00143	.00491	.00864	.01023	.00021	.00022	.01972
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00125	.00104	.00372	.00022	.00732	.47522	-.00014
SDev	.00250	.00302	.00191	.00084	.00100	.13309	.00080
%RSD	200.26	289.32	51.342	380.12	13.659	28.007	582.50
#1	.00284	.00243	.00465	.00000	.00882	.61572	.00010
#2	.00222	.00104	.00093	-.00088	.00682	.30992	-.00048
#3	-.00248	.00385	.00412	.00089	.00682	.43389	.00085
#4	.00242	-.00315	.00518	.00088	.00682	.54133	-.00103
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01205	.00025	.00123	.00469	-.00048	-.01515	.00258
SDev	.00594	.00049	.00402	.00494	.00275	.01905	.01562
%RSD	49.275	198.20	326.31	105.19	574.92	125.78	605.74
#1	.01674	.00099	.00123	.00380	-.00363	.00576	.01039
#2	.00335	.00000	.00123	.00067	.00239	-.01706	-.01041
#3	.01406	.00000	.00616	.01184	-.00184	-.00936	.02080
#4	.01406	.00000	-.00369	.00246	.00116	-.03993	-.01047
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.03524	.00580	-.00204	-.00022	.00008	-.00008	.00034
SDev	.04517	.00555	.00742	.00013	.00049	.03090	.00061
%RSD	128.17	95.701	363.48	57.252	600.00	36421.	181.79
#1	-.02838	.00145	-.00868	-.00012	.00082	-.01762	.00003
#2	-.03230	.00725	-.00672	-.00012	-.00016	-.02928	.00124

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#3	.01471	.00145	.00780	-.00038	-.00016	.04077	.00013
#4	-.09499	.01303	-.00056	-.00027	-.00016	.00579	-.00006

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00238
SDev	.00099
%RSD	41.635

#1	.00154
#2	.00308
#3	.00339
#4	.00152

Errors	LC Pass
High	.02000
Low	-.02000

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Analysis Report

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Method: QUANMET Sample Name: DJ32CCE

Operator: MTW

Run Time: 08/22/00 09:48:49

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04586	1.9646	1.9851	.97396	1.9868	.05020	50.312
SDev	.00137	.0029	.0519	.00584	.0089	.00030	.290
%RSD	2.9881	.14616	2.6167	.60005	.45022	.58979	.57655
#1	.04548	1.9646	2.0518	.96626	1.9748	.04979	49.989
#2	.04693	1.9611	1.9282	.97653	1.9931	.05042	50.496
#3	.04408	1.9681	1.9667	.97994	1.9851	.05016	50.154
#4	.04693	1.9645	1.9938	.97311	1.9941	.05042	50.611
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass
High	.06000	2.4000	2.4000		2.4000	.06000	60.000
Low	.04000	1.6000	1.6000		1.6000	.04000	40.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04596	.49669	.19995	.24673	1.0561	48.491	.97562
SDev	.00303	.00321	.00286	.00085	.0065	.378	.00499
%RSD	6.6000	.64574	1.4287	.34339	.61252	.77936	.51157
#1	.04303	.49392	.19929	.24563	1.0487	48.113	.97114
#2	.05015	.49946	.19664	.24740	1.0627	48.939	.98070
#3	.04476	.49391	.20035	.24651	1.0527	48.253	.97910
#4	.04591	.49947	.20354	.24740	1.0601	48.658	.97153
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.06000	.60000	.24000	.30000	1.2000	60.000	
Low	.04000	.40000	.16000	.20000	.80000	40.000	
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	49.349	.49808	1.0025	49.028	.49557	.50995	.51689
SDev	.243	.00148	.0062	.180	.00714	.02269	.00847
%RSD	.49154	.29670	.61824	.36789	1.4416	4.4493	1.6396
#1	49.020	.49636	1.0013	48.776	.48735	.51936	.51685
#2	49.547	.49931	.99634	49.199	.49269	.50433	.51690
#3	49.314	.49734	1.0013	49.096	.49831	.48143	.52729
#4	49.515	.49932	1.0111	49.043	.50392	.53467	.50654
Errors	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High	60.000	.60000		60.000	.60000	.60000	.60000
Low	40.000	.40000		40.000	.40000	.40000	.40000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9842	9.9120	2.0233	1.0022	.98000	2.0134	.49635
SDev	.0569	.0452	.0303	.0042	.00426	.0293	.00246
%RSD	2.8667	.45630	1.4954	.42063	.43449	1.4538	.49515
#1	1.9136	9.8468	2.0099	.99653	.97451	2.0456	.49266
#2	2.0469	9.9453	2.0428	1.0059	.98303	2.0104	.49744

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#3	1.9685	9.9164	2.0531	1.0014	.97877	2.0222	.49754
#4	2.0077	9.9395	1.9873	1.0048	.98368	1.9754	.49774

Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass
High	2.4000					2.4000	.60000
Low	1.6000					1.6000	.40000

Elem	ZN
Units	ppm
Avge	.48610
SDev	.00572
%RSD	1.1769

#1	.47821
#2	.49060
#3	.48555
#4	.49002

Errors	LC Pass
High	.60000
Low	.40000

Method: QUANMET Sample Name: DHXN9E

Operator: MTW

Run Time: 08/22/00 09:51:57

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00005	2.2362	-.00746	.12357	.07114	-.00003	31.186
SDev	.00214	.0030	.02738	.00153	.00048	.00006	.200
%RSD	4278.4	.13608	367.09	1.2350	.67627	201.74	.64194
#1	.00174	2.2376	-.01810	.12549	.07077	.00006	31.460
#2	-.00254	2.2357	.01280	.12407	.07127	-.00007	31.152
#3	.00173	2.2394	-.04124	.12207	.07077	-.00006	31.154
#4	-.00112	2.2323	.01671	.12267	.07177	-.00006	30.978
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00186	.00136	.00266	.12541	.01297	34.050	.04441
SDev	.00197	.00133	.00210	.00085	.00100	.103	.00057
%RSD	106.22	98.072	79.031	.67366	7.6993	.30218	1.2867
#1	.00185	.00241	.00571	.12608	.01414	34.121	.04360
#2	.00462	.00240	.00199	.12608	.01214	34.013	.04442
#3	.00081	.00101	.00093	.12431	.01347	33.922	.04481
#4	.00015	-.00038	.00199	.12519	.01214	34.145	.04481
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.11983	.00098	.10713	38.743	.04550	-.01633	.12011
SDev	.01125	.00000	.00636	.299	.00540	.00381	.01352
%RSD	9.3926	.21630	5.9355	.77127	11.862	23.312	11.256
#1	.13188	.00098	.10959	38.354	.04998	-.01822	.10444
#2	.12385	.00098	.11452	38.733	.04341	-.01062	.11480
#3	.11849	.00098	.10467	38.805	.04979	-.01822	.13583
#4	.10510	.00098	.09974	39.079	.03882	-.01827	.12536
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00192	3.7983	.00622	.67257	-.00197	.01111	.05997
SDev	.02202	.0488	.01633	.00260	.00042	.02781	.00082
%RSD	1144.0	1.2847	262.59	.38631	21.517	250.36	1.3640
#1	.00298	3.8533	.00820	.66930	-.00147	.00525	.06063
#2	-.02445	3.7491	.02263	.67180	-.00180	-.00641	.06072

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#3	.02648	3.7664	.01040	.67400	-.00246	-.00640	.05931
#4	-.01270	3.8243	-.01635	.67520	-.00213	.05201	.05922

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00403
SDev	.00073
%RSD	18.166

#1	.00446
#2	.00448
#3	.00423
#4	.00294

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

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Method: QUANMET Sample Name: DHXN9P5E

Operator: MTW

Run Time: 08/22/00 09:55:05

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00007	.45488	-.03575	.02037	.01417	.00002	6.3897
SDev	.00309	.00494	.02325	.00709	.00012	.00006	.0290
%RSD	4115.5	1.0863	65.039	34.828	.84285	251.38	.45333
#1	.00436	.45707	-.04929	.01806	.01428	.00006	6.4165
#2	-.00278	.45173	-.06082	.01806	.01407	.00006	6.3559
#3	.00007	.44998	-.02219	.03073	.01428	-.00007	6.3755
#4	-.00135	.46075	-.01072	.01463	.01407	.00006	6.4110
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00073	-.00036	.00213	.02579	.00083	7.1241	.00873
SDev	.00228	.00255	.00051	.00044	.00144	.2779	.00029
%RSD	313.69	715.32	23.973	1.7157	173.48	3.9014	3.3223
#1	-.00224	.00105	.00253	.02557	.00283	7.3927	.00889
#2	.00320	-.00315	.00252	.02556	.00083	6.8720	.00870
#3	.00148	-.00175	.00146	.02557	.00016	6.8968	.00900
#4	.00046	.00244	.00199	.02645	-.00050	7.3349	.00834
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01874	.00074	.02340	7.7024	.00987	.00165	.02609
SDev	.01567	.00049	.00493	.0371	.00951	.02523	.01800
%RSD	83.605	66.838	21.053	.48170	96.350	1531.7	68.999
#1	.03816	.00099	.03078	7.6538	.00201	.03586	.05208
#2	.01406	-.00000	.02093	7.6941	.01343	-.01740	.02091
#3	.00067	.00098	.02093	7.7370	.00234	-.01736	.02081
#4	.02209	.00098	.02093	7.7249	.02172	.00549	.01055
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01176	.77764	.00783	.13503	-.00074	-.00887	.01478
SDev	.04402	.00001	.00376	.00016	.00041	.03485	.00065
%RSD	374.47	.00106	48.027	.12235	55.925	393.14	4.3870
#1	.03037	.77765	.01000	.13487	-.00016	.00570	.01523
#2	-.00489	.77765	.00370	.13491	-.00115	-.05264	.01504

#3	-.04016	.77763	.00575	.13517	-.00082	-.01760	.01382
#4	.06170	.77765	.01187	.13517	-.00082	.02908	.01503
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00156
SDev	.00056
%RSD	35.810

#1	.00147
#2	.00221
#3	.00170
#4	.00086

Errors	LC Pass
High	100.00
Low	-.02000

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Analysis Report

08/22/00 10:01:19 AM

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Method: QUANMET Sample Name: DHXN9SE Operator: MTW
 Run Time: 08/22/00 09:58:14
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04364	4.1568	1.9723	1.1261	2.0342	.04983	80.983
SDev	.00143	.0114	.0619	.0033	.0104	.00024	.215
%RSD	3.2649	.27519	3.1364	.29101	.51021	.48496	.26586
#1	.04433	4.1582	2.0023	1.1270	2.0275	.04965	81.150
#2	.04436	4.1493	1.8826	1.1236	2.0313	.04989	81.140
#3	.04436	4.1474	2.0216	1.1236	2.0285	.04963	80.951
#4	.04150	4.1725	1.9828	1.1304	2.0496	.05014	80.690
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04794	.49008	.19982	.36751	1.0530	82.256	1.0179
SDev	.00248	.00563	.00044	.00232	.0029	.136	.0090
%RSD	5.1685	1.1485	.21788	.63025	.28000	.16558	.88624
#1	.05098	.48973	.19982	.36729	1.0540	82.328	1.0099
#2	.04848	.49811	.20035	.36642	1.0566	82.196	1.0163
#3	.04503	.48695	.19929	.36552	1.0513	82.097	1.0144
#4	.04729	.48553	.19982	.37081	1.0500	82.403	1.0308
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.851	.49314	1.0739	87.330	.54296	.49339	.61128
SDev	.137	.00124	.0074	.664	.02024	.01438	.01689
%RSD	.27981	.25133	.68801	.76054	3.7272	2.9145	2.7635
#1	48.766	.49339	1.0801	86.790	.52973	.47254	.63189
#2	48.787	.49438	1.0801	87.124	.56732	.50310	.61151
#3	48.795	.49142	1.0702	87.106	.52328	.50279	.61118
#4	49.055	.49338	1.0653	88.299	.55149	.49512	.59052
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0135	13.345	1.9673	1.6505	.95002	1.9255	.55136
SDev	.0418	.029	.0313	.0077	.00170	.0970	.00236
%RSD	2.0740	.21530	1.5914	.46886	.17892	5.0364	.42830
#1	2.0116	13.386	2.0126	1.6439	.94896	2.0569	.54782
#2	1.9568	13.322	1.9591	1.6493	.94928	1.8465	.55269

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#3	2.0547	13.345	1.9406	1.6473	.94928	1.8583	.55250
#4	2.0312	13.328	1.9569	1.6617	.95256	1.9401	.55241
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.48319
SDev	.00396
%RSD	.82051

#1	.48093
#2	.48897
#3	.48253
#4	.48032

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHXN9DE Operator: MTW
Run Time: 08/22/00 10:01:22
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04433	4.1688	1.9588	1.1184	2.0197	.04945	81.464
SDev	.00117	.0039	.0380	.0194	.0070	.00007	.087
%RSD	2.6312	.09309	1.9394	1.7381	.34435	.14937	.10653
#1	.04290	4.1688	1.9289	1.1270	2.0213	.04939	81.389
#2	.04576	4.1742	1.9790	1.1270	2.0248	.04939	81.485
#3	.04433	4.1651	2.0022	1.0894	2.0233	.04952	81.404
#4	.04433	4.1671	1.9250	1.1304	2.0095	.04952	81.578
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04660	.48868	.19955	.36641	1.0487	82.634	1.0101
SDev	.00560	.00368	.00219	.00102	.0017	.180	.0091
%RSD	12.028	.75239	1.0987	.27855	.16426	.21805	.90285
#1	.04439	.48555	.19770	.36552	1.0467	82.725	1.0181
#2	.04166	.49393	.20088	.36729	1.0493	82.766	1.0151
#3	.05461	.48691	.19769	.36552	1.0507	82.675	1.0099
#4	.04574	.48835	.20195	.36729	1.0480	82.369	.99742
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.973	.49167	1.0912	87.840	.54005	.49146	.61891
SDev	.094	.00049	.0102	.336	.01061	.00445	.03671
%RSD	.19282	.10043	.93060	.38252	1.9644	.90648	5.9310
#1	48.953	.49142	1.0850	87.940	.55064	.48764	.66347
#2	49.071	.49241	1.0998	88.041	.54665	.49541	.63205
#3	49.017	.49143	1.0998	88.037	.52731	.48756	.57957
#4	48.851	.49142	1.0801	87.341	.53561	.49522	.60056
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9871	13.457	1.9874	1.6477	.95707	1.9635	.54803
SDev	.0394	.028	.0275	.0049	.00269	.0890	.00019
%RSD	1.9807	.20900	1.3854	.29646	.28142	4.5310	.03557
#1	1.9606	13.415	1.9737	1.6487	.95747	2.0803	.54791
#2	1.9528	13.473	1.9592	1.6515	.95944	1.8700	.54820

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#3	2.0390	13.473	1.9939	1.6499	.95813	1.9752	.54819
#4	1.9959	13.467	2.0227	1.6405	.95322	1.9285	.54782
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .48156
SDev .00419
%RSD .86937

#1 .47560
#2 .48483
#3 .48172
#4 .48409

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DHXNDE

Operator: MTW

Run Time: 08/22/00 10:04:30

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00044	1.4065	.01285	.14957	.07639	.00002	26.063
SDev	.00184	.0121	.03474	.02066	.00057	.00007	.064
%RSD	415.31	.85774	270.38	13.813	.74926	367.76	.24419
#1	-.00117	1.4222	-.01908	.15969	.07709	-.00004	26.129
#2	.00026	1.3954	.00044	.16169	.07609	.00009	26.023
#3	-.00257	1.3990	.06208	.15827	.07659	.00008	26.104
#4	.00171	1.4096	.00796	.11865	.07579	-.00005	25.996
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00016	.00066	.00252	.08288	.01314	23.691	.03046
SDev	.00321	.00209	.00168	.00000	.00128	.213	.00024
%RSD	1969.9	315.47	66.864	.00219	9.7102	.89804	.77559
#1	.00185	-.00039	.00305	.08287	.01414	23.633	.03046
#2	.00294	.00240	.00465	.08288	.01281	23.963	.03046
#3	-.00126	.00241	.00092	.08288	.01148	23.715	.03018
#4	-.00418	-.00177	.00145	.08287	.01414	23.451	.03076
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.13523	.00123	.07635	26.742	.03630	-.01590	.08101
SDev	.00457	.00049	.00472	.178	.00472	.00956	.00522
%RSD	3.3818	39.949	6.1769	.66586	13.000	60.121	6.4484
#1	.12920	.00197	.07512	26.957	.03922	-.01783	.08364
#2	.13991	.00099	.08004	26.637	.03120	-.02533	.08353
#3	.13456	.00098	.07019	26.812	.03353	-.00257	.08369
#4	.13724	.00099	.08004	26.560	.04127	-.01788	.07317
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03236	3.5781	.00604	.53063	-.00164	-.00051	.05267
SDev	.02425	.0058	.01184	.00325	.00042	.03502	.00279
%RSD	74.961	.16125	196.15	.61295	25.820	6859.2	5.2888
#1	.01081	3.5810	.00399	.53468	-.00147	-.04136	.05021
#2	.06566	3.5810	.00810	.52841	-.00180	-.01802	.05031

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#3	.03431	3.5811	-.00833	.53180	-.00213	.02867	.05499
#4	.01865	3.5695	.02038	.52763	-.00115	.02867	.05518

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00368
SDev	.00078
%RSD	21.090

#1	.00465
#2	.00336
#3	.00283
#4	.00389

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHXNFE

Operator: MTW

Run Time: 08/22/00 10:07:38

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00063	1.7115	-.01276	.12491	.09717	.00006	21.797
SDev	.00071	.0040	.02564	.00199	.00059	.00007	.099
%RSD	113.61	.23086	200.91	1.5907	.60860	127.70	.45207
#1	.00029	1.7155	.00162	.12753	.09669	-.00005	21.783
#2	.00026	1.7067	-.04454	.12269	.09669	.00009	21.670
#3	.00169	1.7138	-.02144	.12471	.09740	.00009	21.906
#4	.00026	1.7101	.01332	.12471	.09790	.00009	21.830
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00036	.00309	.00465	.09258	.02979	30.383	.03603
SDev	.00137	.00081	.00087	.00072	.00176	.148	.00071
%RSD	379.52	26.022	18.635	.77704	5.9149	.48628	1.9662
#1	.00072	.00239	.00571	.09258	.03012	30.410	.03627
#2	.00215	.00379	.00465	.09170	.02812	30.443	.03608
#3	-.00071	.00379	.00465	.09258	.03212	30.170	.03506
#4	-.00071	.00240	.00359	.09346	.02879	30.509	.03674
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.12586	.00221	.08251	34.057	.03368	-.01400	.17755
SDev	.00507	.00049	.00492	.100	.00547	.02275	.01481
%RSD	4.0276	22.171	5.9697	.29298	16.251	162.56	8.3434
#1	.12920	.00197	.08004	33.975	.03618	-.02540	.17763
#2	.11849	.00295	.08004	34.071	.03960	-.02534	.18810
#3	.12652	.00197	.08004	33.991	.02692	.02013	.15658
#4	.12920	.00197	.08989	34.193	.03200	-.02538	.18791
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01085	3.7012	.00546	.52644	-.00139	-.00361	.05158
SDev	.03017	.0318	.01776	.00148	.00016	.08439	.00241
%RSD	278.04	.86010	325.22	.28127	11.765	2339.4	4.6708
#1	.03044	3.6737	-.00995	.52527	-.00147	.12190	.05519
#2	.03827	3.6736	-.00990	.52527	-.00147	-.05321	.05031

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#3	-.02832	3.7316	.02077	.52684	-.00115	-.05326	.05031
#4	.00301	3.7258	.02092	.52836	-.00147	-.02986	.05050
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00864
SDev	.00045
%RSD	5.2262

#1	.00913
#2	.00879
#3	.00805
#4	.00857

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: CCV2-4

Operator: MTW

Run Time: 08/22/00 10:10:46

Cmment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mdde: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0025	50.101	5.1255	5.0457	5.0056	5.0726	51.630
SDev	.0022	.121	.0650	.0253	.0150	.0123	.169
%RSD	.21799	.24224	1.2688	.50227	.29888	.24320	.32827
#1	1.0037	50.171	5.1516	5.0351	5.0090	5.0793	51.683
#2	1.0050	50.008	5.0297	5.0321	4.9889	5.0622	51.846
#3	1.0006	49.989	5.1461	5.0320	5.0002	5.0622	51.501
#4	1.0008	50.236	5.1745	5.0837	5.0243	5.0866	51.488
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.1695	5.0652	5.0344	4.9720	52.315	49.683	4.9343
SDev	.0211	.0080	.0156	.0196	.070	.154	.0396
%RSD	.40850	.15702	.31066	.39397	.13472	.31062	.80176
#1	5.1403	5.0653	5.0454	4.9786	52.381	49.575	4.9422
#2	5.1877	5.0749	5.0496	4.9495	52.328	49.906	4.8902
#3	5.1683	5.0555	5.0172	4.9644	52.215	49.584	4.9206
#4	5.1818	5.0651	5.0252	4.9953	52.335	49.666	4.9843
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	50.490	5.0548	5.0626	50.406	5.0863	5.0833	5.0916
SDev	.120	.0094	.0231	.269	.0202	.0381	.0519
%RSD	.23707	.18592	.45645	.53321	.39701	.74890	1.0187
#1	50.581	5.0570	5.0823	50.483	5.0984	5.0812	5.0499
#2	50.378	5.0668	5.0823	50.111	5.0824	5.1348	5.0599
#3	50.396	5.0452	5.0478	50.292	5.1050	5.0432	5.0921
#4	50.605	5.0501	5.0380	50.739	5.0596	5.0738	5.1646
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.1329	5.1331	5.1642	5.0173	4.9870	10.083	5.0476
SDev	.0542	.0106	.0604	.0134	.0087	.145	.0125
%RSD	1.0555	.20724	1.1698	.26761	.17409	1.4347	.24713
#1	5.1752	5.1275	5.1204	5.0230	4.9908	10.289	5.0605
#2	5.1202	5.1447	5.2191	5.0047	4.9859	10.044	5.0495

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#3	5.1748	5.1213	5.1042	5.0080	4.9754	10.046	5.0305
#4	5.0615	5.1389	5.2134	5.0335	4.9957	9.9509	5.0498
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem	ZN
Units	ppm
Avge	4.9715
SDev	.0105
%RSD	.21218

#1	4.9781
#2	4.9745
#3	4.9559
#4	4.9776

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB4

Operator: MTW

Run Time: 08/22/00 10:13:54

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00143	.01474	-.00205	.00307	.00038	.00048	.00763
SDev	.00165	.01072	.05098	.00758	.00025	.00010	.00393
%RSD	115.40	72.720	2482.8	246.75	66.667	21.773	51.483
#1	.00000	.00307	.06269	-.00387	.00000	.00035	.00323
#2	.00286	.01748	-.05321	-.00045	.00050	.00048	.00652
#3	.00000	.01023	-.03000	.00297	.00050	.00048	.00809
#4	.00286	.02818	.01231	.01364	.00050	.00061	.01268
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00068	.00104	.00319	.00088	.00300	.51034	-.00037
SDev	.00278	.00197	.00205	.00102	.00246	.16983	.00065
%RSD	411.63	188.98	64.347	115.40	81.925	33.277	174.49
#1	-.00259	-.00034	.00093	-.00000	.00017	.26860	-.00103
#2	.00093	.00384	.00465	.00177	.00283	.56613	.00019
#3	.00417	-.00036	.00519	.00176	.00283	.66530	.00019
#4	.00019	.00104	.00199	.00000	.00616	.54133	-.00083
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00335	.00049	.00369	.01162	.00384	-.01135	.00781
SDev	.00708	.00057	.00284	.00842	.00436	.01143	.01976
%RSD	211.66	115.13	76.964	72.467	113.68	100.75	252.87
#1	-.00201	.00000	.00616	.00067	.00376	-.01711	-.02091
#2	.00602	.00000	.00123	.01542	.00131	.00580	.01049
#3	-.01004	.00099	.00616	.01006	.01001	-.01706	.02087
#4	-.00736	.00099	.00123	.02034	.00028	-.01703	.02081
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.05386	.01882	.00466	.00023	.00041	-.00004	.00008
SDev	.05300	.00819	.02354	.00045	.00056	.04317	.00006
%RSD	98.396	43.514	505.33	193.19	136.63	116870.	70.512
#1	-.08325	.01882	.00350	-.00027	-.00016	.00584	.00012
#2	-.05974	.01303	-.02717	.00040	.00049	-.05261	.00003

#3	.02253	.01303	.01397	.00003	.00016	-.00586	.00013
#4	-.09499	.03040	.02834	.00077	.00115	.05248	.00003
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00025
SDev	.00088
%RSD	346.20

#1	.00020
#2	.00152
#3	-.00037
#4	-.00033

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHV6DB

Operator: MTW

Run Time: 08/22/00 10:17:01

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00072	.01429	-.00400	.00609	.00005	.00009	.05124
SDev	.00185	.00893	.03211	.03165	.00033	.00001	.00434
%RSD	257.30	62.480	803.04	519.91	640.36	7.6074	8.4793
#1	.00143	.01579	-.01076	-.03666	.00000	.00009	.05010
#2	-.00001	.01917	-.02619	.02832	.00000	.00010	.05413
#3	.00288	.02094	.04316	.03173	.00050	.00008	.05514
#4	-.00143	.00129	-.02220	.00097	-.00030	.00010	.04560
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00216	.00069	.00226	.00022	.00250	.57439	-.00075
SDev	.00176	.00384	.00181	.00182	.00067	.42769	.00075
%RSD	81.666	555.14	80.279	823.05	26.673	74.460	99.332
#1	.00137	.00523	.00412	.00177	.00349	.76448	-.00048
#2	.00464	-.00176	-.00013	-.00088	.00216	.49175	-.00075
#3	.00206	.00244	.00306	.00177	.00216	1.0207	-.00001
#4	.00056	-.00314	.00199	-.00177	.00216	.02066	-.00177
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00268	.00025	.00123	.00592	-.00259	-.00568	-.00268
SDev	.01144	.00049	.00697	.00518	.00589	.00976	.01005
%RSD	427.20	199.71	565.51	87.446	227.70	171.73	374.42
#1	-.00469	-.00000	-.00862	-.00112	-.00904	-.01694	-.00006
#2	.00067	.00099	.00616	.00827	-.00562	-.00197	-.01060
#3	.01941	.00000	.00616	.01095	.00013	.00573	-.01051
#4	-.00469	.00000	.00123	.00559	.00418	-.00956	.01044
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01958	.00291	.01386	-.00004	-.00016	-.03215	.00125
SDev	.01820	.00732	.00930	.00005	.00046	.04412	.00265
%RSD	92.953	251.31	67.109	140.00	282.84	137.24	212.75
#1	-.00097	.00146	.00771	-.00012	-.00016	-.08766	.00106
#2	-.02056	.00143	.02615	-.00001	.00016	-.01751	-.00110

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#3	-.04407	.01309	.01587	-.00001	.00016	-.04095	.00500
#4	-.01273	-.00434	.00570	-.00001	-.00082	.01752	.00003
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00106
SDev	.00140
%RSD	131.97

#1	.00101
#2	.00178
#3	.00232
#4	-.00088

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHV6DC

Operator: MTW

Run Time: 08/22/00 10:20:09

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04725	1.9505	1.9525	.96782	1.9791	.04980	50.709
SDev	.00138	.0047	.0256	.00929	.0118	.00015	.367
%RSD	2.9226	.23983	1.3108	.95981	.59426	.29847	.72367

#1	.04831	1.9483	1.9632	.96084	1.9698	.04968	50.689
#2	.04543	1.9501	1.9826	.98134	1.9958	.04995	50.204
#3	.04693	1.9465	1.9245	.96284	1.9786	.04991	51.047
#4	.04834	1.9572	1.9399	.96626	1.9721	.04966	50.895

Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass
High	.06000	2.4000	2.4000		2.4000	.06000	60.000
Low	.04000	1.6000	1.6000		1.6000	.04000	40.000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04810	.49236	.19966	.24430	1.0485	48.445	.97324
SDev	.00245	.00417	.00374	.00114	.0053	.332	.01237
%RSD	5.0928	.84626	1.8740	.46612	.50101	.68585	1.2711

#1	.04752	.49132	.20059	.24386	1.0513	48.484	.96626
#2	.04508	.48713	.19475	.24474	1.0413	48.013	.99144
#3	.04888	.49690	.20378	.24563	1.0533	48.823	.97048
#4	.05091	.49410	.19953	.24298	1.0480	48.460	.96478

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.06000	.60000	.24000	.30000	1.2000	60.000	
Low	.04000	.40000	.16000	.20000	.80000	40.000	

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	49.583	.49603	.00016	49.442	.49899	.50727	L.01977
SDev	.148	.00254	.00472	.352	.00901	.02676	.02737
%RSD	.29938	.51249	3007.9	.71178	1.8056	5.2746	138.45

#1	49.489	.49504	-.00354	49.228	.50137	.48069	L.01712
#2	49.711	.49307	-.00354	49.967	.50732	.48814	L.00681
#3	49.708	.49898	.00139	49.316	.48618	.53401	L.05880
#4	49.424	.49701	.00631	49.255	.50109	.52625	L-.00366

Errors	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass	LC Low
High	60.000	.60000		60.000	.60000	.60000	.60000
Low	40.000	.40000		40.000	.40000	.40000	.40000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9773	.02363	-.00638	.99818	-.00188	1.9464	.49039
SDev	.0262	.00875	.02579	.00489	.00056	.0664	.00636
%RSD	1.3274	37.024	404.36	.48969	29.701	3.4133	1.2975

#1	1.9646	.01926	.02032	.99412	-.00180	1.8705	.48788
#2	2.0155	.01919	-.01260	1.0049	-.00246	1.9757	.48300

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#3	1.9724	.03676	.00613	.99856	-.00213	1.9171	.49774
#4	1.9567	.01932	-.03936	.99511	-.00115	2.0223	.49295
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass
High	2.4000	.				2.4000	.60000
Low	1.6000					1.6000	.40000

Elem	ZN
Units	ppm
Avge	.48818
SDev	.00098
%RSD	.20148

#1	.48714
#2	.48787
#3	.48823
#4	.48949

Errors	LC Pass
High	.60000
Low	.40000

Method: QUANMET Sample Name: DHM8P

Operator: MTW

Run Time: 08/22/00 10:23:22

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00000	.55095	-.01966	-.00147	.06519	.00010	85.976
SDev	.00270	.00447	.01194	.00907	.00042	.00000	.396
%RSD	88218.	.81136	60.718	618.06	.64913	.00000	.46089
#1	-.00178	.54871	-.01288	-.01506	.06474	.00010	85.845
#2	-.00178	.55766	-.02068	.00307	.06524	.00010	85.475
#3	-.00035	.54873	-.00905	.00310	.06574	.00010	86.330
#4	.00393	.54871	-.03603	.00303	.06503	.00010	86.254
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00040	-.00003	.00200	.19367	4.6560	3.1468	.00132
SDev	.00186	.00134	.00137	.00084	.0157	.3688	.00089
%RSD	466.21	3937.9	68.846	.43556	.33617	11.719	67.407
#1	.00193	.00101	.00253	.19257	4.6462	3.2769	.00112
#2	-.00059	-.00178	.00146	.19433	4.6615	2.6819	.00030
#3	-.00032	-.00038	.00040	.19345	4.6755	3.0703	.00140
#4	-.00261	.00102	.00359	.19433	4.6409	3.5579	.00244
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	31.310	.18601	.00439	9.3892	.00353	.04408	.00263
SDev	.123	.00148	.00284	.0795	.00541	.00958	.04381
%RSD	.39164	.79495	64.723	.84652	153.41	21.739	1663.6
#1	31.189	.18527	.00685	9.3523	.00686	.05743	.03138
#2	31.440	.18528	.00193	9.4855	-.00304	.04204	L-.06266
#3	31.387	.18823	.00193	9.4167	.00138	.03460	.02095
#4	31.223	.18527	.00685	9.3023	.00891	.04224	.02087
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00732	4.4896	-.01503	.13245	.00123	.04931	.00009
SDev	.04198	.0170	.02198	.00104	.00049	.01461	.00006
%RSD	573.38	.37974	146.23	.78724	40.000	29.621	64.598
#1	.03869	4.4780	-.01798	.13215	.00147	.05232	.00014
#2	-.06313	4.4722	-.02869	.13335	.00082	.06386	.00004

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#3	-.00433	4.5069	-.03035	.13319	.00082	.05204	.00004
#4	-.00051	4.5011	.01690	.13110	.00180	.02902	.00014
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.03092
SDev	.00205
%RSD	6.6410

#1	.02913
#2	.02915
#3	.03255
#4	.03284

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DHM8V

Operator: MTW

Run Time: 08/22/00 10:26:30

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00188	.39078	-.04867	.00272	.03667	.00021	83.571
SDev	.00179	.00470	.01140	.00102	.00015	.00000	.447
%RSD	95.647	1.2032	23.420	37.597	.40306	.06123	.53465
#1	.00223	.38764	-.03318	.00323	.03660	.00021	82.988
#2	-.00062	.38588	-.04865	.00391	.03660	.00021	83.960
#3	.00367	.39480	-.05258	.00189	.03660	.00021	83.878
#4	.00223	.39481	-.06028	.00185	.03689	.00021	83.457
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00252	.00102	.01130	1.1808	3.3013	4.3534	.00106
SDev	.00238	.00114	.00092	.0037	.0195	.1272	.00059
%RSD	94.819	111.39	8.1551	.31686	.59009	2.9221	55.359
#1	-.00101	.00103	.01050	1.1764	3.2775	4.4092	.00151
#2	.00358	-.00038	.01050	1.1843	3.3194	4.1695	.00038
#3	.00324	.00102	.01210	1.1834	3.3148	4.3761	.00076
#4	.00425	.00241	.01210	1.1790	3.2935	4.4588	.00159
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14.089	.03316	.00542	15.215	.00701	.16026	.02071
SDev	.077	.00049	.00246	.046	.00468	.01807	.02251
%RSD	.54983	1.4748	45.412	.30504	66.692	11.276	108.69
#1	14.040	.03340	.00665	15.162	.00247	.13370	.01027
#2	14.204	.03341	.00173	15.269	.00679	.16402	.02068
#3	14.070	.03243	.00665	15.235	.00530	.17168	.05199
#4	14.043	.03340	.00665	15.196	.01349	.17165	-.00010
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00110	5.0470	.06185	.11112	-.00025	.01568	.00500
SDev	.03060	.0336	.01998	.00058	.00049	.07960	.00005
%RSD	2790.8	.66495	32.313	.52130	200.00	507.59	.97185
#1	-.00410	5.0108	.04125	.11040	-.00082	.12394	.00502
#2	.00385	5.0919	.08445	.11171	-.00049	-.06331	.00493

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#3	.03518	5.0456	.07227	.11145	.00016	-.01657	.00503
#4	-.03932	5.0398	.04942	.11093	.00016	.01867	.00503
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.09495
SDev	.00296
%RSD	3.1178

#1	.09452
#2	.09183
#3	.09897
#4	.09447

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM8X

Operator: MTW

Run Time: 08/22/00 10:29:38

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00041	6.7065	-.01142	.01377	.11205	.00055	90.197
SDev	.00070	.0203	.01808	.00242	.00065	.00006	.572
%RSD	173.39	.30214	158.23	17.573	.58379	11.323	.63366

#1	.00002	6.6900	-.00922	.01116	.11198	.00058	89.480
#2	.00008	6.7078	.00578	.01290	.11177	.00057	90.871
#3	.00146	6.6937	-.00546	.01410	.11147	.00045	90.150
#4	.00006	6.7347	-.03680	.01692	.11298	.00058	90.288

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00064	.00715	.01249	.04864	18.306	9.0932	.01014
SDev	.00150	.00081	.00153	.00114	.084	.3388	.00085
%RSD	236.63	11.294	12.215	2.3492	.45800	3.7263	8.4270

#1	.00109	.00785	.01156	.04819	18.204	8.9878	.00919
#2	-.00220	.00646	.01475	.04997	18.377	9.5167	.01115
#3	-.00154	.00786	.01209	.04731	18.269	8.7068	.00974
#4	.00011	.00645	.01156	.04908	18.372	9.1613	.01049

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	45.746	.45836	.01259	5.2484	.02607	.01074	.01566
SDev	.159	.00220	.00620	.0292	.00580	.03361	.02173
%RSD	.34675	.48112	49.278	.55605	22.246	312.84	138.77

#1	45.590	.45563	.01380	5.2531	.02007	.04303	.01032
#2	45.769	.46060	.01383	5.2218	.02379	.03540	.04179
#3	45.667	.45761	.00396	5.2312	.02664	-.01012	-.01037
#4	45.957	.45961	.01876	5.2875	.03378	-.02534	.02089

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02523	12.929	.00688	.07459	.07462	.02070	.01124
SDev	.01943	.051	.02228	.00013	.00143	.05327	.00246
%RSD	77.019	.39126	323.97	.17511	1.9097	257.40	21.887

#1	-.00395	12.869	.03354	.07440	.07355	.06552	.01004
#2	-.05051	12.968	-.01765	.07466	.07584	-.05303	.01492

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#3	-.02728	12.904	-.00352	.07466	.07322	.05319	.00985
#4	-.01918	12.974	.01513	.07466	.07584	.01711	.01014

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.37844
SDev	.00457
%RSD	1.2077

#1	.37827
#2	.38453
#3	.37747
#4	.37348

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM91

Operator: MTW

Run Time: 08/22/00 10:32:46

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00076	2.1721	-.01773	-.00676	.03722	.00023	74.413
SDev	.00072	.0128	.01707	.00114	.00036	.00006	.345
%RSD	94.586	.58994	96.288	16.918	.95313	27.886	.46322
#1	.00112	2.1766	-.02551	-.00571	.03739	.00033	74.441
#2	-.00032	2.1532	.00177	-.00583	.03668	.00020	73.920
#3	.00112	2.1819	-.03710	-.00778	.03739	.00020	74.599
#4	.00112	2.1766	-.01008	-.00771	.03739	.00020	74.693
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00087	.00135	.00664	.02267	10.543	2.6529	.00496
SDev	.00470	.00069	.00153	.00111	.032	.3491	.00030
%RSD	542.48	51.305	22.974	4.8988	.30063	13.159	5.9667
#1	.00228	.00239	.00624	.02289	10.568	2.7810	.00459
#2	L-.00726	.00102	.00465	.02288	10.502	2.1777	.00514
#3	-.00149	.00100	.00784	.02112	10.535	2.6488	.00525
#4	.00301	.00099	.00784	.02377	10.568	3.0042	.00487
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	19.474	.09841	.00527	2.3255	-.00022	-.00188	.01555
SDev	.027	.00081	.00635	.0086	.00281	.02515	.03465
%RSD	.13676	.82188	120.56	.37183	1304.2	1335.9	222.79
#1	19.479	.09842	.00281	2.3267	-.00295	-.02087	-.01062
#2	19.484	.09742	.01265	2.3361	.00308	.00189	-.01052
#3	19.436	.09841	.00773	2.3151	.00112	-.02080	.06256
#4	19.498	.09940	-.00211	2.3241	-.00211	.03225	.02078
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01728	7.0262	.01793	.07699	.01810	.03173	.00987
SDev	.03617	.0415	.01841	.00025	.00031	.05541	.00012
%RSD	209.36	.59053	102.68	.32471	1.7329	174.63	1.2238
#1	-.02407	7.0493	.04247	.07706	.01786	.03731	.00982
#2	.02277	6.9856	-.00069	.07675	.01818	.10806	.01000

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#3	-.00456	7.0725	.00993	.07686	.01786	-.00905	.00992
#4	-.06324	6.9972	.02002	.07732	.01851	-.00939	.00973
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.02171
SDev	.00158
%RSD	7.2826

#1	.01943
#2	.02228
#3	.02307
#4	.02205

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM94

Operator: MTW

Run Time: 08/22/00 10:35:54

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00019	2.2583	-.00677	.00995	.04031	.00026	84.904
SDev	.00083	.0084	.03837	.00071	.00012	.00007	.345
%RSD	436.13	.37315	567.12	7.1732	.29641	28.261	.40693
#1	-.00091	2.2463	-.00375	.00956	.04020	.00033	84.579
#2	.00053	2.2606	-.03864	.00962	.04020	.00033	85.392
#3	.00052	2.2659	.04624	.00960	.04041	.00020	84.839
#4	-.00090	2.2606	-.03092	.01102	.04041	.00020	84.806
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00068	.00065	.00678	.03216	8.0610	2.7439	.00695
SDev	.00117	.00070	.00115	.00044	.0132	.2405	.00051
%RSD	172.66	107.48	16.959	1.3756	.16430	8.7660	7.3124
#1	.00064	-.00040	.00571	.03150	8.0421	2.6571	.00768
#2	.00195	.00099	.00624	.03239	8.0714	3.0455	.00655
#3	.00100	.00100	.00837	.03238	8.0620	2.7976	.00693
#4	-.00087	.00100	.00678	.03239	8.0687	2.4753	.00666
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.978	.10532	.00613	8.7248	.00341	.00054	.01560
SDev	.046	.00049	.00247	.0152	.00709	.01894	.02482
%RSD	.42080	.46667	40.200	.17434	207.58	3527.2	159.16
#1	10.910	.10556	.00243	8.7149	-.00281	.00238	-.01051
#2	10.993	.10557	.00736	8.7154	.01096	.02518	.00000
#3	11.014	.10458	.00736	8.7217	.00796	-.00513	.03125
#4	10.993	.10556	.00736	8.7471	-.00245	-.02029	.04164
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00815	7.0783	.01027	.10995	.01712	.01946	.00988
SDev	.03391	.0000	.01292	.00013	.00062	.05579	.00005
%RSD	416.30	.00000	125.79	.11881	3.6229	286.72	.49629
#1	.00846	7.0783	-.00526	.10988	.01622	-.05332	.00981
#2	.00070	7.0783	.00712	.11014	.01753	.06314	.00991

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#3	-.05809	7.0783	.02575	.10988	.01753	.06323	.00991
#4	.01636	7.0783	.01348	.10988	.01720	.00478	.00991
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.07364
SDev	.00058
%RSD	.78746

#1	.07332
#2	.07435
#3	.07305
#4	.07386

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM94P5 Operator: MTW
 Run Time: 08/22/00 10:39:02
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00067	.47091	-.01548	-.00171	.00854	.00009	17.812
SDev	.00137	.00989	.03295	.00211	.00000	.00000	.374
%RSD	205.36	2.1013	212.84	123.36	.00000	1.8861	2.1011
#1	.00041	.47724	-.00497	.00028	.00854	.00010	18.316
#2	-.00102	.48077	-.03583	-.00120	.00854	.00010	17.854
#3	-.00246	.45924	-.04721	-.00123	.00854	.00010	17.628
#4	.00040	.46640	.02607	-.00470	.00854	.00009	17.450
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00122	.00208	.00332	.00719	1.7022	.95043	.00112
SDev	.00249	.00210	.00141	.00000	.0350	.29302	.00065
%RSD	204.45	100.72	42.312	.06101	2.0564	30.830	58.548
#1	-.00175	.00383	.00306	.00720	1.7470	.60745	.00093
#2	.00301	.00382	.00412	.00719	1.7084	1.1860	.00195
#3	.00351	-.00037	.00146	.00719	1.6898	.80580	.00038
#4	.00010	.00104	.00465	.00719	1.6638	1.2025	.00121
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.2795	.02261	.00518	1.7923	.00207	.00885	.00258
SDev	.0526	.00058	.00246	.0391	.00303	.02276	.00522
%RSD	2.3060	2.5459	47.457	2.1821	146.19	257.11	202.59
#1	2.3410	.02312	.00149	1.8453	.00068	-.01767	-.00005
#2	2.2982	.02311	.00641	1.7971	.00370	.02786	-.00005
#3	2.2607	.02212	.00641	1.7694	-.00143	-.00258	.01041
#4	2.2179	.02211	.00641	1.7573	.00534	.02780	-.00000
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02882	1.4565	-.00019	.02255	.00319	-.00287	.00041
SDev	.04843	.0379	.01330	.00061	.00031	.00616	.00063
%RSD	168.05	2.6047	7010.3	2.6925	9.8198	214.28	152.80
#1	.04280	1.5129	.01213	.02324	.00344	-.01210	.00003
#2	-.04349	1.4319	.01007	.02272	.00344	-.00003	.00013

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#3	-.05138	1.4376	-.01454	.02246	.00278	.00019	.00013
#4	-.06320	1.4434	-.00843	.02178	.00311	.00044	.00135
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.01666
SDev	.00103
%RSD	6.1665

#1	.01581
#2	.01790
#3	.01582
#4	.01713

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM94S Operator: MTW
Run Time: 08/22/00 10:42:10
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04674	3.9786	1.9715	.97081	2.0115	.05052	135.33
SDev	.00187	.0047	.0238	.00201	.0068	.00012	.29
%RSD	3.9938	.11732	1.2083	.20729	.33871	.24213	.21329
#1	.04602	3.9732	2.0063	.97180	2.0096	.05043	135.10
#2	.04890	3.9804	1.9637	.97182	2.0040	.05042	135.73
#3	.04457	3.9841	1.9523	.97182	2.0123	.05057	135.15
#4	.04747	3.9769	1.9638	.96779	2.0203	.05067	135.33
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04725	.49198	.20378	.27583	9.3870	51.030	.98894
SDev	.00529	.00464	.00304	.00088	.0067	.070	.00548
%RSD	11.204	.94278	1.4915	.31945	.07102	.13806	.55400
#1	.04771	.49128	.20538	.27539	9.3802	51.055	.98488
#2	.04120	.49828	.20697	.27539	9.3961	51.038	.98359
#3	.04608	.48709	.20006	.27538	9.3861	50.931	.99425
#4	.05403	.49125	.20271	.27715	9.3855	51.096	.99304
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	60.593	.59946	.00264	58.544	.49659	.53816	.00666
SDev	.099	.00049	.00899	.249	.00822	.01869	.02694
%RSD	.16275	.08189	341.27	.42565	1.6561	3.4727	404.63
#1	60.553	.59872	.01249	58.360	.50596	.55334	.01708
#2	60.518	.59971	.00756	58.308	.50069	.55355	.03799
#3	60.561	.59970	-.00229	58.690	.49177	.53042	-.00387
#4	60.738	.59970	-.00722	58.818	.48793	.51534	-.02457
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0149	6.7196	-.01981	1.1042	.01409	2.0594	.49410
SDev	.0631	.0116	.03171	.0031	.00057	.0364	.00468
%RSD	3.1326	.17284	160.06	.27691	4.0280	1.7687	.94624
#1	2.0257	6.7138	-.00692	1.1033	.01392	2.0886	.49308
#2	2.0022	6.7371	-.00888	1.1007	.01491	2.0066	.49786

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#3	2.0923	6.7138	.00326	1.1049	.01360	2.0770	.48791
#4	1.9395	6.7139	-.06669	1.1080	.01392	2.0652	.49757
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .53679
SDev .00432
%RSD .80501

#1 .53678
#2 .54231
#3 .53176
#4 .53630

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DHM94D

Operator: MTW

Run Time: 08/22/00 10:45:18

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04619	3.8319	1.9871	.97026	1.9741	.04975	134.75
SDev	.00137	.0293	.0581	.00224	.0070	.00027	.73
%RSD	2.9578	.76542	2.9221	.23068	.35321	.53711	.53853

#1	.04725	3.8426	2.0585	.97265	1.9809	.05007	134.88
#2	.04439	3.7890	1.9702	.97057	1.9648	.04943	134.31
#3	.04725	3.8408	1.9196	.97059	1.9774	.04982	134.10
#4	.04585	3.8552	2.0004	.96724	1.9731	.04968	135.72

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04660	.48327	.20073	.27004	8.7512	50.582	.96942
SDev	.00215	.00563	.00334	.00124	.0260	.359	.00815
%RSD	4.6058	1.1647	1.6665	.46068	.29687	.71000	.84100

#1	.04848	.48012	.20326	.27180	8.7604	50.766	.97354
#2	.04806	.48292	.19900	.26915	8.7271	50.451	.96323
#3	.04379	.47874	.19688	.27003	8.7337	50.146	.97888
#4	.04608	.49130	.20379	.26917	8.7837	50.964	.96202

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	60.099	.58649	.00623	58.055	.49473	.51544	.03268
SDev	.245	.00233	.00246	.262	.00896	.02408	.01994
%RSD	.40849	.39756	39.532	.45184	1.8114	4.6721	61.026

#1	60.285	.58674	.00747	58.170	.48734	.50778	.04819
#2	59.742	.58477	.00746	57.712	.49541	.53819	.00660
#3	60.138	.58477	.00254	58.326	.48906	.48498	.04837
#4	60.229	.58970	.00747	58.011	.50713	.53081	.02756

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9702	6.5588	-.01775	1.0853	.01384	1.8821	.48441
SDev	.0735	.0346	.01804	.0040	.00049	.0792	.00246
%RSD	3.7303	.52716	101.61	.36623	3.5503	4.2106	.50746

#1	2.0750	6.5400	.00132	1.0890	.01425	1.8265	.48322
#2	1.9299	6.5342	-.02764	1.0798	.01327	1.8035	.48322

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#3	1.9104	6.5516	-.03772	1.0872	.01425	1.9319	.48312
#4	1.9654	6.6095	-.00698	1.0850	.01360	1.9663	.48810
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.52615
SDev	.00330
%RSD	.62747

#1	.52339
#2	.52338
#3	.52789
#4	.52994

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-5

Operator: MTW

Run Time: 08/22/00 10:48:26

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0056	50.213	5.0612	5.0660	5.0089	5.0963	52.108
SDev	.0032	.193	.0444	.0478	.0249	.0241	.195
%RSD	.32264	.38384	.87767	.94345	.49801	.47209	.37464
#1	1.0036	50.044	5.0833	5.0310	4.9928	5.0844	51.880
#2	1.0096	50.484	5.1097	5.1313	5.0458	5.1306	52.018
#3	1.0067	50.209	5.0426	5.0723	5.0023	5.0943	52.312
#4	1.0023	50.116	5.0089	5.0296	4.9948	5.0759	52.221
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.2243	5.0898	5.0615	4.9656	52.531	49.768	4.9021
SDev	.0227	.0154	.0130	.0314	.143	.214	.0409
%RSD	.43438	.30263	.25762	.63151	.27280	.43100	.83387
#1	5.1948	5.0679	5.0438	4.9512	52.339	49.683	4.8899
#2	5.2195	5.0943	5.0645	5.0112	52.661	50.063	4.9626
#3	5.2357	5.1041	5.0752	4.9592	52.617	49.559	4.8825
#4	5.2472	5.0929	5.0624	4.9407	52.507	49.765	4.8735
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	50.621	5.0760	5.0700	50.496	5.1595	5.1313	5.1314
SDev	.192	.0124	.0124	.300	.0106	.0315	.0198
%RSD	.37911	.24407	.24486	.59423	.20583	.61405	.38546
#1	50.471	5.0580	5.0528	50.333	5.1440	5.0967	5.1446
#2	50.897	5.0846	5.0725	50.945	5.1684	5.1274	5.1341
#3	50.600	5.0836	5.0824	50.361	5.1625	5.1278	5.1027
#4	50.514	5.0777	5.0725	50.343	5.1630	5.1732	5.1443
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.1276	5.1015	5.1367	5.0298	4.9984	10.100	5.0722
SDev	.0448	.0431	.0509	.0227	.0173	.111	.0138
%RSD	.87402	.84528	.99074	.45067	.34547	1.0940	.27292
#1	5.0850	5.0405	5.0921	5.0140	4.9780	10.126	5.0538
#2	5.1603	5.1394	5.1310	5.0629	5.0193	10.087	5.0859

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#3	5.1719	5.1219	5.1145	5.0260	5.0026	10.228	5.0788
#4	5.0933	5.1044	5.2092	5.0162	4.9934	9.9606	5.0701
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem ZN
Units ppm
Avge 4.9866
SDev .0101
%RSD .20328

#1 4.9809
#2 4.9983
#3 4.9915
#4 4.9759

Errors LC Pass
High 5.5000
Low 4.5000

Method: QUANMET Sample Name: CCB5 Operator: MTW
Run Time: 08/22/00 10:51:34
Cmment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00215	.01645	-.01079	.00181	.00030	.00028	.00588
SDev	.00275	.01386	.01849	.00206	.00024	.00013	.00227
%RSD	127.47	84.244	171.29	113.97	80.991	47.143	38.603

#1	.00431	.02272	-.01474	.00437	.00050	.00021	.00680
#2	.00431	.03161	-.02254	.00237	.00021	.00021	.00860
#3	.00143	.01197	-.02229	.00095	.00000	.00022	.00462
#4	-.00143	-.00049	.01640	-.00046	.00050	.00048	.00351

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00244	.00244	.00253	.00066	.00133	.72522	-.00032
SDev	.00198	.00114	.00115	.00084	.00167	.25396	.00030
%RSD	81.073	46.863	45.397	127.14	125.04	35.018	91.267

#1	.00401	.00243	.00412	.00177	-.00050	1.0042	-.00048
#2	.00370	.00104	.00146	.00088	.00350	.85539	-.00036
#3	-.00033	.00244	.00200	.00000	.00083	.60745	-.00056
#4	.00236	.00383	.00253	.00000	.00150	.43389	.00010

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00736	.00099	.01108	.00782	.00009	-.01319	.01823
SDev	.01769	.00000	.00402	.00688	.00336	.00757	.01000
%RSD	240.29	.16444	36.289	87.908	3579.8	57.343	54.844

#1	.02745	.00099	.00616	.00425	.00411	-.01700	.01045
#2	.01674	.00099	.01108	.01810	-.00396	-.00185	.03131
#3	-.01004	.00099	.01601	.00514	-.00068	-.01700	.01037
#4	-.00469	.00099	.01108	.00380	.00090	-.01694	.02081

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.02252	.01161	-.00865	.00004	.00016	-.02340	.00266
SDev	.06417	.00292	.01451	.00040	.00053	.04318	.00276
%RSD	284.92	25.117	167.75	1034.0	326.60	184.51	103.92

#1	.05779	.01309	-.00457	-.00027	.00016	-.01756	.00500
#2	-.04407	.01309	-.02708	.00014	.00082	-.02927	.00509

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#3	-.00881	.01303	-.01074	-.00027	-.00049	.02917	.00031
#4	-.09500	.00724	.00780	.00056	.00016	-.07594	.00022
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00107
SDev	.00093
%RSD	86.903

#1	.00153
#2	.00156
#3	-.00033
#4	.00153

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHM99

Operator: MTW

Run Time: 08/22/00 10:54:42

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00033	13.866	-.02129	-.00422	.07508	.00199	101.92
SDev	.00072	.094	.02070	.00019	.00078	.00008	.74
%RSD	219.75	.68075	97.233	4.4491	1.0342	3.8887	.72853

#1	.00001	13.790	-.01192	-.00435	.07458	.00205	101.74
#2	-.00141	13.931	-.01309	-.00420	.07609	.00206	101.35
#3	.00007	13.962	-.05216	-.00396	.07529	.00192	103.01
#4	.00001	13.779	-.00798	-.00436	.07437	.00193	101.59

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00175	.00844	.02112	.02654	17.632	6.0848	.03857
SDev	.00221	.00180	.00376	.00113	.096	.4519	.00026
%RSD	126.38	21.280	17.806	4.2633	.54661	7.4264	.66612

#1	.00017	.00776	.02591	.02786	17.561	6.6654	.03842
#2	-.00019	.00914	.02006	.02611	17.641	6.1861	.03833
#3	.00244	.00635	.01686	.02523	17.765	5.6158	.03891
#4	.00456	.01052	.02165	.02698	17.562	5.8720	.03861

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.989	.29818	.00387	4.5849	.02011	.00849	.01295
SDev	.088	.00189	.00401	.0451	.00443	.02552	.01977
%RSD	.67383	.63286	103.78	.98437	22.053	300.45	152.59

#1	12.891	.29693	.00386	4.5308	.02172	.02371	.01026
#2	13.036	.29793	.00879	4.6340	.02550	-.02943	.04169
#3	13.084	.30092	-.00104	4.6068	.01781	.02350	-.00001
#4	12.942	.29693	.00386	4.5679	.01541	.01619	-.00013

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00238	H24.074	-.00226	.13314	.14727	.06745	.03242
SDev	.01675	.172	.02243	.00127	.00364	.05244	.00204
%RSD	703.63	.71480	992.70	.95523	2.4706	77.746	6.2863

#1	.01395	H23.890	.02701	.13204	.14268	.12949	.03304
#2	.00240	H24.087	.00044	.13413	.14792	.02358	.02946

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#3	.01448	H24.301	-.02643	.13434	.14694	.09237	.03414
#4	-.02131	H24.018	-.01005	.13204	.15153	.02437	.03303

Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.05876
SDev	.00130
%RSD	2.2177

#1	.06035
#2	.05900
#3	.05850
#4	.05720

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM9C

Operator: MTW

Run Time: 08/22/00 10:57:55

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00023	.45121	.00167	.00210	.03910	.00019	103.57
SDev	.00137	.00662	.02686	.00133	.00014	.00006	.48
%RSD	610.66	1.4675	1612.6	63.253	.35661	32.720	.46696

#1	.00084	.45208	.02003	.00244	.03920	.00022	103.78
#2	.00087	.45029	.00836	.00106	.03920	.00021	104.11
#3	-.00058	.45929	-.03797	.00106	.03911	.00022	103.40
#4	-.00202	.44317	.01625	.00384	.03890	.00010	102.99

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00144	.00137	.00359	.01594	3.6100	2.6612	.00374
SDev	.00128	.00288	.00298	.00085	.0125	.3232	.00085
%RSD	88.589	209.52	82.889	5.3159	.34745	12.146	22.649

#1	.00204	-.00037	.00306	.01528	3.6024	2.5662	.00393
#2	.00167	.00382	.00784	.01704	3.6203	3.0455	.00476
#3	-.00041	.00382	.00253	.01616	3.6210	2.7563	.00355
#4	.00247	-.00177	.00093	.01527	3.5964	2.2769	.00272

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	15.542	.11858	.00547	3.7660	.00098	-.00299	-.00006
SDev	.022	.00057	.00246	.0096	.00435	.01865	.00852
%RSD	.14441	.47971	45.086	.25492	445.79	622.86	13519.

#1	15.545	.11907	.00670	3.7535	.00732	-.01823	-.01044
#2	15.529	.11907	.00670	3.7642	-.00123	.00466	-.00015
#3	15.521	.11809	.00670	3.7705	-.00233	.01983	-.00009
#4	15.572	.11808	.00177	3.7758	.00014	-.01823	.01043

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00266	5.1888	.01096	.12470	-.00147	.07138	.00164
SDev	.04675	.0397	.01523	.00029	.00046	.02602	.00233
%RSD	1761.0	.76468	138.87	.23153	31.427	36.451	142.66

#1	-.00716	5.2019	.00013	.12436	-.00082	.06273	.00014
#2	.07124	5.2251	.03100	.12457	-.00147	.05080	.00502

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#3	-.03062	5.1324	.01456	.12494	-.00180	.06249	.00135
#4	-.02285	5.1961	-.00183	.12494	-.00180	.10951	.00004
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.01296
SDev	.00095
%RSD	7.3004

#1	.01216
#2	.01298
#3	.01429
#4	.01242

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM9D

Operator: MTW

Run Time: 08/22/00 11:01:04

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00103	.50484	-.00652	.00052	.03883	.00015	103.34
SDev	.00137	.00227	.02206	.00069	.00030	.00007	.29
%RSD	133.05	.45047	338.36	132.49	.77765	50.290	.28441
#1	.00210	.50748	.01276	.00087	.03890	.00008	103.55
#2	.00210	.50220	.00508	.00088	.03890	.00008	103.26
#3	-.00076	.50394	-.00652	-.00052	.03911	.00021	103.59
#4	.00067	.50573	-.03739	.00086	.03840	.00021	102.96
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00283	-.00038	.00319	.01323	2.7860	2.7934	.00350
SDev	.00165	.00000	.00159	.00044	.0060	.1081	.00044
%RSD	58.184	1.2059	49.794	3.3354	.21402	3.8688	12.621
#1	.00158	-.00037	.00359	.01345	2.7835	2.7315	.00349
#2	.00218	-.00037	.00465	.01345	2.7875	2.9546	.00412
#3	.00231	-.00037	.00359	.01345	2.7935	2.7315	.00319
#4	.00525	-.00038	.00093	.01256	2.7795	2.7563	.00319
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.546	.09768	.00165	3.7085	.00202	.00662	.00784
SDev	.040	.00057	.00402	.0150	.01006	.01297	.02320
%RSD	.25524	.58317	244.02	.40437	497.29	196.06	295.76
#1	15.510	.09818	.00657	3.6923	.01583	.01232	.02104
#2	15.521	.09719	-.00328	3.7012	-.00814	.00475	.03128
#3	15.599	.09818	.00165	3.7267	-.00111	-.01049	-.02095
#4	15.553	.09719	.00165	3.7137	.00151	.01988	.00000
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00245	5.2946	-.00354	.12437	-.00049	.01846	.00491
SDev	.02626	.0125	.01672	.00054	.00027	.04903	.00008
%RSD	1070.1	.23628	472.09	.43299	54.433	265.61	1.5648
#1	-.00540	5.2946	-.02454	.12405	-.00049	-.03406	.00501
#2	.03379	5.2830	-.00805	.12383	-.00049	.04763	.00482

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#3	-.00929	5.3120	.01430	.12503	-.00082	.07093	.00491
#4	-.02892	5.2888	.00412	.12457	-.00016	-.01067	.00491
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00989
SDev	.00186
%RSD	18.779

#1	.01116
#2	.01124
#3	.00990
#4	.00726

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM9E

Operator: MTW

Run Time: 08/22/00 11:04:12

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00107	.07685	-.02379	-.00228	.01171	.00003	4.4186
SDev	.00071	.00518	.02239	.00313	.00010	.00007	.0215
%RSD	66.502	6.7365	94.104	137.20	.88328	230.94	.48651
#1	.00143	.07636	-.01896	-.00384	.01177	.00010	4.3900
#2	.00143	.07640	.00033	-.00585	.01177	-.00003	4.4158
#3	.00143	.07101	-.02278	.00099	.01177	-.00003	4.4286
#4	.00000	.08362	-.05376	-.00042	.01156	.00010	4.4400
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00090	-.00315	.00253	.00881	.01431	.58886	-.00008
SDev	.00075	.00114	.00043	.00102	.00206	.12395	.00045
%RSD	83.569	36.195	17.138	11.558	14.402	21.049	545.27
#1	.00143	-.00455	.00253	.00793	.01148	.41736	-.00017
#2	.00161	-.00175	.00200	.00970	.01614	.65704	.00057
#3	.00057	-.00315	.00253	.00793	.01548	.58266	-.00045
#4	.00000	-.00315	.00306	.00970	.01414	.69836	-.00028
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.74375	.00123	.00370	.26215	.00014	.01314	-.00006
SDev	.01321	.00049	.00493	.00419	.00389	.03559	.02088
%RSD	1.7760	39.735	133.26	1.5995	2840.7	270.82	37376.
#1	.72902	.00099	.00616	.26305	-.00020	-.00205	.01032
#2	.75848	.00099	.00616	.26752	.00088	-.00962	-.03138
#3	.73706	.00099	.00616	.25768	.00466	-.00201	.01037
#4	.75045	.00197	-.00369	.26036	-.00479	.06626	.01046
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01367	.48066	.00154	.01231	-.00041	.01448	.00008
SDev	.02107	.00869	.02584	.00012	.00016	.03357	.00009
%RSD	154.08	1.8072	1672.3	1.0007	40.000	231.82	123.62
#1	-.01662	.47632	.02214	.01231	-.00049	.04079	.00012
#2	-.01661	.48790	-.00271	.01222	-.00049	-.02934	.00012

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#3	.01473	.47053	.02008	.01222	-.00016	.00571	.00012
#4	-.03620	.48790	-.03333	.01248	-.00049	.04076	-.00007

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00846
SDev	.00117
%RSD	13.867

#1	.00808
#2	.00807
#3	.00752
#4	.01018

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHP5X

Operator: MTW

Run Time: 08/22/00 11:07:20

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00058	.32450	-.03319	.00123	.01400	.00005	80.032
SDev	.00273	.01272	.01574	.00271	.00015	.00006	.858
%RSD	475.38	3.9205	47.436	219.52	1.0560	126.84	1.0723
#1	.00157	.33391	-.03713	.00471	.01378	.00008	80.175
#2	-.00415	.30700	-.04462	-.00154	.01407	-.00005	78.842
#3	.00157	.33393	-.04099	-.00012	.01407	.00008	80.216
#4	-.00129	.32317	-.01002	.00188	.01407	.00008	80.892
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00201	-.00070	.00160	.00026	.48429	1.9401	.00356
SDev	.00241	.00366	.00133	.00044	.00526	.2939	.00076
%RSD	119.94	520.97	83.328	169.14	1.0852	15.150	21.465
#1	.00205	-.00036	.00146	.00004	.48679	2.0620	.00432
#2	-.00140	-.00593	-.00013	.00091	.47680	1.5000	.00261
#3	.00341	.00104	.00199	.00004	.48879	2.0951	.00330
#4	.00397	.00243	.00306	.00004	.48479	2.1033	.00401
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14.010	.01465	.01239	5.1126	-.00090	-.00980	.01039
SDev	.074	.00049	.00246	.0168	.00453	.01068	.01483
%RSD	.52838	3.3682	19.883	.32847	501.27	108.98	142.73
#1	14.043	.01489	.01116	5.1159	-.00624	.00535	-.01059
#2	13.930	.01391	.01115	5.1168	-.00260	-.00993	.01042
#3	13.971	.01489	.01116	5.0891	.00426	-.01733	.02085
#4	14.096	.01489	.01608	5.1288	.00097	-.01729	.02087
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00617	3.5457	-.00549	.16470	-.00434	-.00495	.00512
SDev	.03452	.0211	.02257	.00052	.00094	.02232	.00005
%RSD	559.18	.59640	410.75	.31724	21.678	451.00	.96794
#1	-.00361	3.5688	.01598	.16443	-.00377	.02422	.00509
#2	.04729	3.5225	-.02501	.16443	-.00573	-.02235	.00509

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#3	.01598	3.5341	.01202	.16443	-.00377	.00083	.00509
#4	-.03496	3.5572	-.02496	.16548	-.00410	-.02249	.00519
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00453
SDev	.00224
%RSD	49.386

#1	.00548
#2	.00151
#3	.00676
#4	.00437

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHP61

Operator: MTW

Run Time: 08/22/00 11:10:28

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00024	.05500	-.01302	.00225	.01503	.00010	40.263
SDev	.00083	.00884	.05025	.00072	.00029	.00000	.165
%RSD	346.48	16.079	386.00	32.171	1.9302	.00000	.41004
#1	-.00048	.04429	.03435	.00189	.01528	.00010	40.304
#2	.00096	.06565	.02643	.00334	.01478	.00010	40.313
#3	.00095	.05322	-.05836	.00191	.01528	.00010	40.411
#4	-.00048	.05684	-.05450	.00187	.01478	.00010	40.027
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00084	.00139	.00133	.01179	4.0537	2.0352	-.00003
SDev	.00168	.00070	.00091	.00072	.0135	.2706	.00070
%RSD	199.65	50.473	68.213	6.1039	.33307	13.298	2543.5
#1	-.00121	.00244	.00253	.01179	4.0524	2.1943	-.00075
#2	.00017	.00104	.00040	.01091	4.0690	1.7232	-.00009
#3	.00243	.00104	.00146	.01267	4.0570	2.3182	-.00020
#4	.00198	.00104	.00093	.01179	4.0364	1.9050	.00093
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	16.857	.07396	.00307	2.5496	-.00083	-.00287	-.00779
SDev	.104	.00081	.00620	.0117	.01272	.00003	.01010
%RSD	.61775	1.0937	202.01	.45840	1541.4	1.0143	129.69
#1	16.739	.07396	.00184	2.5355	-.00000	-.00284	-.01037
#2	16.948	.07495	.01169	2.5623	-.01371	-.00291	-.02100
#3	16.940	.07396	.00184	2.5453	.01630	-.00287	.00017
#4	16.798	.07297	-.00309	2.5551	-.00589	-.00287	.00005
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00187	2.2556	-.03213	.03507	-.00238	.03445	.00006
SDev	.05791	.0099	.01272	.00021	.00016	.05724	.00012
%RSD	3104.8	.43846	39.596	.60714	6.8965	166.15	192.21
#1	.00970	2.2426	-.04293	.03489	-.00246	.08116	.00004
#2	-.00593	2.2658	-.03270	.03526	-.00246	-.03577	.00023

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#3	-.06865	2.2542	-.01412	.03526	-.00213	.08113	.00004
#4	.07234	2.2600	-.03877	.03489	-.00246	.01127	-.00006

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00924
SDev	.00182
%RSD	19.680

#1	.00790
#2	.00980
#3	.01156
#4	.00769

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHP63

Operator: MTW

Run Time: 08/22/00 11:13:36

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00014	.68553	-.01128	-.00145	.05106	.00005	108.02
SDev	.00247	.00105	.01917	.00001	.00024	.00013	.36
%RSD	1774.8	.15337	169.92	.59809	.48063	264.41	.33750
#1	-.00083	.68460	-.02292	-.00144	.05076	-.00006	108.31
#2	.00342	.68652	-.00355	-.00145	.05126	.00021	108.31
#3	-.00229	.68465	-.03055	-.00146	.05096	-.00004	107.55
#4	-.00086	.68637	.01188	-.00144	.05126	.00008	107.92
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00087	.00241	.00359	.00812	2.3115	3.2790	.00130
SDev	.00259	.00301	.00130	.00072	.0040	.4895	.00035
%RSD	298.61	124.73	36.305	8.8948	.17442	14.929	26.910
#1	-.00153	.00242	.00465	.00812	2.3142	3.2935	.00156
#2	.00437	.00659	.00306	.00901	2.3129	3.8637	.00085
#3	-.00055	.00102	.00199	.00812	2.3055	2.6653	.00159
#4	.00118	-.00038	.00465	.00724	2.3135	3.2935	.00121
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	23.493	.04000	.00281	2.5227	.00518	.00860	.01309
SDev	.132	.00000	.00246	.0251	.00385	.02661	.01564
%RSD	.56197	.00403	87.699	.99489	74.309	309.38	119.53
#1	23.562	.04000	.00158	2.5274	.00952	.02755	.00008
#2	23.348	.04000	.00158	2.4961	.00029	-.01782	.03130
#3	23.423	.04000	.00158	2.5122	.00631	.03513	.02097
#4	23.640	.04000	.00650	2.5551	.00459	-.01046	.00001
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00217	5.4307	.00050	.10421	.00082	.00257	.00616
SDev	.01612	.0100	.01526	.00049	.00046	.08381	.00242
%RSD	742.18	.18481	3068.5	.46555	56.569	3264.2	39.374
#1	.00512	5.4336	.00403	.10455	.00082	.05214	.00979
#2	.00120	5.4162	.02061	.10361	.00147	.04048	.00491

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#3	-.01841	5.4394	-.01231	.10403	.00049	-.12288	.00491
#4	.02079	5.4336	-.01035	.10466	.00049	.04053	.00501

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.02214
SDev	.00091
%RSD	4.1246

#1	.02103
#2	.02313
#3	.02257
#4	.02181

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHP65

Operator: MTW

Run Time: 08/22/00 11:16:44

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00107	.24055	-.00470	-.00133	.05400	-.00000	105.11
SDev	.00142	.00694	.03573	.00142	.00021	.00006	.11
%RSD	133.12	2.8859	760.46	106.96	.38287	1727.5	.10930
#1	.00035	.24457	.00880	.00038	.05398	-.00003	104.95
#2	.00321	.24463	-.05681	-.00305	.05398	-.00003	105.23
#3	.00037	.23022	.00497	-.00103	.05427	.00008	105.13
#4	.00035	.24278	.02425	-.00163	.05377	-.00003	105.12
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00109	.00172	.00226	.12399	1.4815	4.3782	.00726
SDev	.00293	.00332	.00159	.00051	.0016	.3871	.00072
%RSD	268.52	193.00	70.492	.40931	.10612	8.8424	9.9658
#1	-.00323	-.00036	.00306	.12355	1.4827	3.9877	.00760
#2	.00235	.00660	-.00013	.12355	1.4814	4.2935	.00627
#3	.00202	.00102	.00306	.12443	1.4827	4.9133	.00795
#4	.00323	-.00038	.00306	.12443	1.4794	4.3183	.00721
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	15.850	.02329	.00761	7.6946	.00975	.01663	.01049
SDev	.042	.00049	.00246	.0186	.00676	.02518	.00854
%RSD	.26187	2.1083	32.363	.24149	69.323	151.37	81.434
#1	15.837	.02305	.00638	7.7151	.00035	.02037	.01042
#2	15.888	.02305	.01130	7.6757	.01631	.02056	.01053
#3	15.877	.02305	.00638	7.7052	.01205	.04316	.00005
#4	15.797	.02403	.00638	7.6824	.01028	-.01755	.02097
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02055	4.9355	-.00120	.24522	-.00344	.01108	.00137
SDev	.02228	.0157	.01808	.00013	.00046	.06135	.00242
%RSD	108.39	.31806	1508.9	.05203	13.469	553.56	176.84
#1	.05386	4.9123	-.01250	.24517	-.00311	-.04437	.00013
#2	.01076	4.9413	.01421	.24507	-.00344	-.02106	.00022

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#3	.00684	4.9471	.01416	.24533	-.00410	.01397	.00500
#4	.01075	4.9413	-.02067	.24533	-.00311	.09580	.00013
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.06477
SDev	.00151
%RSD	2.3246

#1	.06480
#2	.06397
#3	.06687
#4	.06345

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHP69

Operator: MTW

Run Time: 08/22/00 11:19:52

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00079	.07105	-.00577	.00442	.03357	.00012	91.842
SDev	.00083	.00634	.03030	.00286	.00024	.00006	.195
%RSD	105.18	8.9240	525.31	64.692	.73094	52.547	.21198
#1	.00008	.07642	.03083	.00225	.03337	.00008	91.612
#2	.00151	.07461	-.01161	.00487	.03337	.00008	91.864
#3	.00006	.06215	.00015	.00227	.03388	.00010	92.085
#4	.00151	.07103	-.04245	.00829	.03367	.00021	91.809
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00192	-.00071	.00199	.01038	.25845	2.4649	.00147
SDev	.00129	.00175	.00137	.00085	.00196	.1557	.00062
%RSD	66.969	246.32	68.897	8.1395	.75791	6.3166	42.451
#1	.00168	.00103	.00252	.01060	.25645	2.6323	.00140
#2	.00229	-.00036	.00146	.00972	.25778	2.3678	.00065
#3	.00032	-.00315	.00040	.00972	.26111	2.3017	.00167
#4	.00340	-.00037	.00359	.01148	.25845	2.5579	.00214
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.919	.01729	.00004	7.7577	.00192	.00936	.00263
SDev	.051	.00057	.00246	.0572	.00739	.02805	.01775
%RSD	.42524	3.2848	6371.6	.73726	384.98	299.57	674.83
#1	11.874	.01778	.00127	7.6963	.00123	.04355	-.00000
#2	11.877	.01778	.00127	7.7262	.01232	.01313	-.02073
#3	11.954	.01679	-.00366	7.8232	-.00493	.00552	.01040
#4	11.970	.01680	.00127	7.7852	-.00095	-.02474	.02085
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01009	4.2913	.00059	.11636	-.00483	.01784	.00366
SDev	.02870	.0128	.01312	.00085	.00041	.08757	.00249
%RSD	284.38	.29896	2214.4	.72982	8.5309	490.76	67.938
#1	-.00422	4.2753	.00777	.11537	-.00475	-.00843	.00491
#2	-.05123	4.2869	-.01903	.11604	-.00475	.02660	.00490

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#3	-.00029	4.2984	.00577	.11735	-.00541	-.07848	-.00007
#4	.01537	4.3043	.00787	.11667	-.00442	.13168	.00491

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.01626
SDev	.00061
%RSD	3.7766

#1	.01619
#2	.01670
#3	.01674
#4	.01542

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHP6D

Operator: MTW

Run Time: 08/22/00 11:23:00

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00042	.09116	-.02806	.00478	.03314	.00009	90.393
SDev	.00215	.00512	.02859	.00253	.00046	.00001	.401
%RSD	508.24	5.6174	101.88	52.966	1.3862	7.6066	.44411
#1	-.00138	.08357	-.03469	.00477	.03367	.00010	89.914
#2	.00150	.09426	-.06574	.00397	.03266	.00008	90.890
#3	-.00136	.09256	-.00397	.00216	.03337	.00008	90.326
#4	.00293	.09424	-.00785	.00820	.03287	.00008	90.441
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00019	.00034	.00199	.00663	.20885	2.5558	.00194
SDev	.00272	.00081	.00115	.00051	.00207	.2129	.00101
%RSD	1402.1	237.81	57.572	7.6764	.99141	8.3299	52.096
#1	-.00149	-.00035	.00040	.00707	.20585	2.4422	.00065
#2	.00237	.00103	.00306	.00707	.20919	2.6819	.00225
#3	-.00274	.00105	.00199	.00619	.21052	2.3182	.00178
#4	.00263	-.00037	.00252	.00619	.20985	2.7810	.00308
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.826	.01432	.00373	7.8275	.00453	.01321	.02353
SDev	.012	.00057	.00492	.0414	.00945	.01636	.02310
%RSD	.09848	3.9728	132.21	.52883	208.58	123.81	98.172
#1	11.842	.01383	.00619	7.8304	.01328	.03592	-.01031
#2	11.815	.01482	.00619	7.7843	.00728	.01326	.04180
#3	11.828	.01383	-.00366	7.8827	-.00889	.00566	.03126
#4	11.820	.01482	.00619	7.8125	.00645	-.00197	.03135
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01524	4.3072	.00119	.11518	-.00467	-.02254	.00373
SDev	.01662	.0034	.01377	.00050	.00031	.07590	.00241
%RSD	109.05	.07804	1153.3	.43067	6.7188	336.73	64.563
#1	.01523	4.3042	-.01899	.11500	-.00508	-.03124	.00012
#2	.02700	4.3043	.00590	.11474	-.00442	.08546	.00500

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#3	.02700	4.3101	.01202	.11589	-.00475	-.05469	.00481
#4	-.00826	4.3101	.00585	.11510	-.00442	-.08970	.00500
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.01372
SDev	.00088
%RSD	6.3949

#1	.01484
#2	.01279
#3	.01393
#4	.01334

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-6

Operator: MTW

Run Time: 08/22/00 11:26:08

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0137	50.259	5.2228	5.1038	5.0133	5.1331	52.782
SDev	.0030	.120	.0871	.0298	.0143	.0090	.182
%RSD	.29469	.23900	1.6669	.58370	.28478	.17532	.34572
#1	1.0111	50.176	5.3319	5.0767	5.0009	5.1265	52.612
#2	1.0112	50.343	5.2492	5.1240	5.0257	5.1394	52.695
#3	1.0169	50.380	5.1329	5.1345	5.0255	5.1422	52.786
#4	1.0155	50.137	5.1774	5.0798	5.0009	5.1243	53.034
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.2877	5.1458	5.1109	4.9650	52.881	49.914	4.8544
SDev	.0275	.0132	.0130	.0152	.100	.491	.0345
%RSD	.51966	.25626	.25370	.30597	.18939	.98329	.71085
#1	5.2540	5.1306	5.0922	4.9566	52.736	50.187	4.8460
#2	5.2796	5.1430	5.1129	4.9778	52.905	50.468	4.8929
#3	5.3184	5.1471	5.1172	4.9778	52.921	49.509	4.8674
#4	5.2987	5.1625	5.1214	4.9479	52.963	49.493	4.8114
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	50.785	5.1199	5.1366	50.456	5.1955	5.1518	5.1625
SDev	.114	.0087	.0213	.240	.0338	.0249	.1049
%RSD	.22541	.16903	.41427	.47505	.64971	.48257	2.0328
#1	50.680	5.1073	5.1366	50.384	5.1832	5.1210	5.0918
#2	50.945	5.1221	5.1267	50.683	5.2222	5.1819	5.0715
#3	50.782	5.1231	5.1661	50.606	5.1533	5.1517	5.1854
#4	50.734	5.1270	5.1169	50.151	5.2233	5.1525	5.3012
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.1814	5.1295	5.2000	5.0501	5.0199	10.298	5.1059
SDev	.1057	.0030	.0479	.0127	.0085	.331	.0068
%RSD	2.0405	.05772	.92041	.25190	.16863	3.2166	.13369
#1	5.2976	5.1279	5.2500	5.0393	5.0085	10.005	5.0970
#2	5.0787	5.1280	5.1349	5.0609	5.0239	10.680	5.1054

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#3	5.2432	5.1339	5.2052	5.0614	5.0282	10.038	5.1134
#4	5.1062	5.1281	5.2099	5.0389	5.0190	10.469	5.1076
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem	ZN
Units	ppm
Avge	5.0200
SDev	.0218
%RSD	.43389

#1	4.9909
#2	5.0276
#3	5.0186
#4	5.0428

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB6

Operator: MTW

Run Time: 08/22/00 11:29:16

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00179	.01431	-.00304	.00483	.00055	.00057	.00961
SDev	.00215	.00613	.02465	.00823	.00042	.00026	.00220
%RSD	119.76	42.831	811.98	170.43	76.346	45.627	22.905
#1	.00288	.01925	-.02243	.00035	.00000	.00034	.00656
#2	-.00002	.01213	.01637	.00236	.00050	.00036	.01166
#3	.00428	.01925	.02010	.01705	.00071	.00073	.00957
#4	.00002	.00662	-.02618	-.00044	.00101	.00085	.01064
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00092	.00279	.00332	.00066	.00383	.58059	.00012
SDev	.00127	.00209	.00165	.00084	.00280	.22848	.00063
%RSD	138.65	75.041	49.681	127.10	73.104	39.352	534.31
#1	.00280	.00383	.00571	.00177	.00216	.81407	.00074
#2	.00015	.00105	.00306	.00088	.00083	.72316	.00019
#3	.00012	.00523	.00253	.00001	.00549	.46695	.00030
#4	.00061	.00104	.00199	.00000	.00682	.31819	-.00075
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00803	.00099	.00246	.01587	.00027	-.00373	-.00524
SDev	.01034	.00000	.00472	.00439	.00674	.01566	.00607
%RSD	128.74	.23345	191.45	27.696	2482.1	419.71	115.80
#1	.01406	.00098	-.00369	.01497	.00158	-.01697	-.00001
#2	.00067	.00098	.00123	.01006	.00397	-.01706	-.01046
#3	-.00201	.00099	.00616	.01989	.00514	.01341	.00004
#4	.01941	.00099	.00616	.01855	-.00959	.00570	-.01055
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00097	.01160	-.00105	.00052	.00016	.01745	.00127
SDev	.04146	.00291	.01214	.00037	.00027	.02526	.00384
%RSD	4277.5	25.060	1154.8	70.678	163.30	144.74	301.38
#1	-.02448	.01309	.01387	.00003	.00016	.01743	.00482
#2	.00686	.01298	.00355	.00056	-.00016	.04089	-.00363

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#3	-.04014	.00724	-.01284	.00056	.00049	-.01761	.00012
#4	.05389	.01308	-.00878	.00093	.00016	.02909	.00378

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00112
SDev	.00089
%RSD	79.133

#1	.00022
#2	.00095
#3	.00097
#4	.00235

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHP6H

Operator: MTW

Run Time: 08/22/00 11:32:24

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00010	.15999	-.02494	.00506	.03320	.00009	86.478
SD	.00117	.00529	.02365	.00283	.00024	.00001	.462
%RSD	1153.5	3.3067	94.863	55.960	.71608	7.6666	.53458
#1	.00008	.15871	-.00846	.00848	.03317	.00010	85.962
#2	.00011	.15332	-.04323	.00164	.03287	.00008	86.295
#3	.00154	.16220	-.04717	.00567	.03337	.00008	87.048
#4	-.00132	.16573	-.00089	.00447	.03337	.00008	86.608
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00370	-.00177	.00199	.00466	.35715	2.3100	.00140
SD	.00238	.00115	.00184	.00111	.00390	.3629	.00058
%RSD	64.539	64.838	92.334	23.840	1.0909	15.710	41.768
#1	.00134	-.00036	-.00066	.00444	.35498	2.2769	.00187
#2	.00653	-.00317	.00252	.00355	.35299	2.1612	.00054
#3	.00216	-.00176	.00359	.00620	.35898	2.8224	.00159
#4	.00476	-.00177	.00253	.00444	.36164	1.9794	.00159
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.008	.01609	.00498	7.7008	.00467	.00356	-.00521
SD	.012	.00049	.00620	.0408	.00359	.02180	.00600
%RSD	.10138	3.0613	124.49	.52997	76.748	612.79	115.15
#1	11.992	.01584	.00621	7.6686	.00260	-.00969	-.01050
#2	12.016	.01584	-.00364	7.7258	.00774	-.00976	-.01031
#3	12.005	.01682	.00621	7.6637	.00068	.03581	.00001
#4	12.019	.01584	.01114	7.7450	.00767	-.00213	-.00004
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00094	4.3897	-.00149	.11358	-.00287	.00223	.00376
SD	.03554	.0192	.02497	.00058	.00031	.03933	.00243
%RSD	3777.0	.43656	1679.0	.50969	10.942	1765.1	64.639
#1	-.03530	4.3621	.02212	.11328	-.00311	.06065	.00012
#2	-.02356	4.4027	-.02308	.11406	-.00278	-.02108	.00481

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#3	.03523	4.4027	-.02304	.11291	-.00246	-.00947	.00500
#4	.02740	4.3912	.01806	.11406	-.00311	-.02118	.00510

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.01009
SDev	.00054
%RSD	5.3163

#1	.01014
#2	.01069
#3	.00939
#4	.01015

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHP6L

Operator: MTW

Run Time: 08/22/00 11:35:32

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00039	.38941	-.01099	.00067	.01021	.00005	78.024
SDev	.00178	.00526	.02993	.00201	.00010	.00006	.363
%RSD	459.37	1.3499	272.39	300.25	1.0138	106.18	.46578
#1	-.00139	.39118	-.01006	.00368	.01005	.00008	78.554
#2	.00004	.38226	-.04858	-.00034	.01026	.00008	77.735
#3	.00004	.38943	.02469	-.00034	.01026	.00008	77.865
#4	.00287	.39476	-.01001	-.00032	.01026	-.00003	77.944
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00098	-.00034	.00133	.00022	.06023	1.9835	.00136
SDev	.00256	.00197	.00243	.00151	.00239	.2710	.00018
%RSD	261.11	573.49	182.85	670.16	3.9730	13.661	13.107
#1	-.00397	.00106	.00253	.00089	.06073	1.9629	.00121
#2	-.00134	-.00034	-.00120	.00000	.05807	1.9629	.00159
#3	.00226	.00104	.00412	.00177	.05873	2.3348	.00140
#4	-.00087	-.00314	-.00013	-.00176	.06340	1.6736	.00123
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	15.132	.01009	.00863	7.0812	.00641	-.01351	.01830
SDev	.084	.00049	.00284	.0466	.00715	.00982	.01004
%RSD	.55592	4.8827	32.961	.65870	111.45	72.693	54.864
#1	15.229	.00985	.01109	7.0795	.00329	-.00210	.01033
#2	15.151	.00985	.00617	7.1318	.01302	-.02489	.02105
#3	15.122	.00985	.00617	7.0942	-.00218	-.00966	.03136
#4	15.026	.01083	.01109	7.0196	.01151	-.01740	.01049
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02531	3.6079	-.00348	.11479	-.00442	.01109	.00383
SDev	.03816	.0304	.03234	.00060	.00027	.02432	.00241
%RSD	150.81	.84265	928.59	.52257	6.0481	219.36	62.949
#1	.00702	3.6267	.04065	.11500	-.00475	-.01813	.00509
#2	-.02433	3.6152	-.01682	.11537	-.00442	.04029	.00499

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#3	-.00474	3.5630	-.03527	.11484	-.00442	.01692	.00500
#4	-.07917	3.6267	-.00249	.11395	-.00410	.00527	.00021

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00421
SDev	.00099
%RSD	23.508

#1	.00308
#2	.00414
#3	.00550
#4	.00413

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-7

Operator: MTW

Run Time: 08/22/00 11:38:41

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0076	50.347	5.2067	5.0962	5.0372	5.1586	52.557
SDev	.0037	.141	.0874	.0148	.0219	.0136	.299
%RSD	.36557	.27979	1.6782	.28953	.43499	.26374	.56826
#1	1.0113	50.402	5.2675	5.0920	5.0281	5.1612	52.930
#2	1.0084	50.450	5.1515	5.1180	5.0483	5.1681	52.618
#3	1.0082	50.398	5.1140	5.0864	5.0610	5.1664	52.215
#4	1.0025	50.139	5.2937	5.0884	5.0114	5.1386	52.466
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.2828	5.1360	5.1008	4.9943	52.858	50.057	4.8969
SDev	.0390	.0275	.0213	.0181	.141	.213	.0361
%RSD	.73818	.53513	.41773	.36207	.26742	.42510	.73730
#1	5.3323	5.1652	5.1230	4.9866	53.014	49.790	4.8780
#2	5.2954	5.1513	5.1134	5.0069	52.941	50.270	4.9087
#3	5.2484	5.1040	5.0762	5.0113	52.730	49.989	4.9415
#4	5.2551	5.1236	5.0906	4.9725	52.748	50.179	4.8592
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	50.939	5.1110	5.1427	50.911	5.2245	5.1079	5.2099
SDev	.215	.0177	.0307	.242	.0393	.0512	.0404
%RSD	.42250	.34607	.59785	.47558	.75179	1.0015	.77555
#1	51.055	5.1330	5.1711	50.760	5.2754	5.1370	5.1864
#2	51.125	5.1172	5.1612	51.104	5.2274	5.1519	5.2700
#3	50.937	5.0935	5.1021	51.130	5.1804	5.0368	5.1965
#4	50.637	5.1004	5.1366	50.650	5.2150	5.1058	5.1864
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.1598	5.1281	5.1499	5.0729	5.0256	10.237	5.1093
SDev	.0648	.0124	.0870	.0183	.0121	.058	.0170
%RSD	1.2549	.24232	1.6890	.36059	.24032	.56347	.33206
#1	5.1455	5.1283	5.2319	5.0700	5.0328	10.305	5.1257
#2	5.1101	5.1167	5.0515	5.0857	5.0367	10.166	5.1219

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#3	5.2545	5.1453	5.2135	5.0878	5.0236	10.227	5.0975
#4	5.1292	5.1221	5.1025	5.0482	5.0095	10.250	5.0921
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem	ZN
Units	ppm
Avge	5.0056
SDev	.0169
%RSD	.33739

#1	5.0296
#2	4.9995
#3	4.9901
#4	5.0031

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB7

Operator: MTW

Run Time: 08/22/00 11:41:49

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00107	.01430	-.01845	.00352	.00025	.00035	.00542
SDev	.00138	.01121	.01798	.00102	.00029	.00018	.00277
%RSD	128.88	78.373	97.456	28.946	115.47	50.130	51.089
#1	-.00000	.00136	-.02992	.00296	.00000	.00022	.00323
#2	.00143	.02458	-.00309	.00438	.00050	.00022	.00842
#3	-.00002	.00855	-.03764	.00437	.00000	.00036	.00291
#4	.00287	.02272	-.00314	.00236	.00050	.00060	.00712
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00177	.00104	.00173	.00110	.00067	.61778	-.00005
SDev	.00221	.00114	.00182	.00044	.00084	.19410	.00067
%RSD	125.34	109.76	105.04	39.965	125.77	31.419	1392.3
#1	.00158	.00244	.00093	.00088	-.00050	.50827	.00019
#2	.00477	-.00036	-.00013	.00088	.00083	.90498	-.00009
#3	-.00056	.00105	.00200	.00176	.00083	.49175	-.00094
#4	.00127	.00104	.00412	.00088	.00150	.56613	.00065
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00736	.00098	.00246	.00749	-.00058	-.00187	.00518
SDev	.01208	.00000	.00246	.00683	.00772	.04797	.01802
%RSD	163.97	.08850	99.999	91.244	1330.8	2566.8	347.79
#1	.02209	.00098	.00123	.00872	.00582	-.01700	.00006
#2	.00602	.00098	.00123	.00022	.00020	.04359	-.01049
#3	-.00736	.00098	.00123	.00469	-.01163	.02852	.03117
#4	.00870	.00099	.00616	.01631	.00329	-.06258	-.00002
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00588	.01593	.00465	-.00010	.00016	.02626	.00005
SDev	.02956	.00576	.01132	.00050	.00046	.06493	.00303
%RSD	502.83	36.167	243.60	520.84	282.84	247.23	5934.3
#1	-.02840	.01303	-.00668	-.00049	.00016	-.00585	.00003
#2	.03428	.01303	.01793	-.00049	.00049	.12261	.00002

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#3	-.00881	.02457	.00991	.00003	-.00049	-.01750	-.00363
#4	.02645	.01308	-.00257	.00056	.00049	.00579	.00378

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00118
SDev	.00121
%RSD	102.56

#1	-.00035
#2	.00153
#3	.00255
#4	.00099

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHV64BF Operator: MTW
 Run Time: 08/22/00 11:44:58
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00036	.00757	-.00104	-.00306	-.00015	.00022	.02982
SDev	.00072	.00516	.02033	.00146	.00017	.00000	.00101
%RSD	199.52	68.255	1963.9	47.594	115.47	.79801	3.3887

#1	.00000	.00129	.01639	-.00507	-.00030	.00022	.02889
#2	.00000	.00669	-.02225	-.00307	.00000	.00022	.02902
#3	.00144	.01381	-.01461	-.00246	.00000	.00022	.03055
#4	.00000	.00848	.01633	-.00165	-.00030	.00022	.03083

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00031	.00000	.00173	.00044	.00233	.48141	-.00079
SDev	.00145	.00238	.00111	.00051	.00064	.15200	.00071
%RSD	460.68	139760.	64.054	115.16	27.409	31.574	89.290

#1	-.00078	-.00314	.00040	.00088	.00150	.32645	-.00169
#2	-.00202	.00245	.00306	.00000	.00283	.46695	-.00017
#3	.00140	.00104	.00200	.00088	.00216	.69010	-.00103
#4	.00014	-.00035	.00146	-.00000	.00283	.44216	-.00028

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00201	.00000	.00369	.01587	.00305	-.02844	.01305
SDev	.00847	.00000	.00284	.00520	.00441	.01317	.02613
%RSD	421.64	54.471	76.974	32.770	144.56	46.324	200.32

#1	-.01272	.00000	.00123	.00961	.00610	-.03232	.01046
#2	.00335	.00000	.00616	.01363	-.00350	-.03980	-.02098
#3	.00602	.00000	.00616	.01944	.00468	-.00941	.04171
#4	-.00469	.00000	.00123	.02078	.00494	-.03223	.02099

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01470	-.02461	.00212	-.00020	-.00049	.02041	.00038
SDev	.03944	.00579	.02550	.00015	.00027	.04987	.00064
%RSD	268.32	23.545	1204.0	78.431	54.433	244.36	169.49

#1	.06954	-.03330	.00776	-.00027	-.00082	-.01751	.00002
#2	.00686	-.02172	.00145	.00003	-.00049	.08753	.00012

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#3	-.02448	-.02170	.03050	-.00027	-.00049	-.01756	.00134
#4	.00686	-.02172	-.03123	-.00027	-.00016	.02917	.00003

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00210
SDev	.00131
%RSD	62.223

#1	.00282
#2	.00232
#3	.00307
#4	.00020

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHV64CF Operator: MTW
 Run Time: 08/22/00 11:48:06
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05095	2.0322	2.0730	1.0347	2.0198	.05415	L.04885
SDev	.00138	.0097	.0684	.0000	.0127	.00021	.00135
%RSD	2.7129	.47826	3.2988	.00069	.62754	.39256	2.7554

#1	.05277	2.0452	1.9849	1.0347	2.0216	.05419	L.04986
#2	.04987	2.0291	2.1512	1.0347	2.0275	.05421	L.04982
#3	.05127	2.0219	2.0703	1.0347	2.0013	.05384	L.04871
#4	.04988	2.0327	2.0855	1.0347	2.0287	.05434	L.04699

Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Low
High	.06000	2.4000	2.4000		2.4000	.06000	60.000
Low	.04000	1.6000	1.6000		1.6000	.04000	40.000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04960	.53561	.21268	.25669	1.1139	L.44629	.95291
SDev	.00360	.00330	.00279	.00210	.0042	.18226	.00332
%RSD	7.2541	.61631	1.3136	.81794	.37481	40.839	.34856

#1	.04839	.54015	.21440	.25802	1.1152	L.20248	.95299
#2	.04782	.53596	.21334	.25537	1.1186	L.54960	.95607
#3	.05495	.53317	.21441	.25448	1.1086	L.61572	.94831
#4	.04723	.53317	.20856	.25889	1.1132	L.41736	.95428

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	NOCHECK
High	.06000	.60000	.24000	.30000	1.2000	60.000	
Low	.04000	.40000	.16000	.20000	.80000	40.000	

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	L.00402	.53170	.00263	L.02727	.55898	.53303	L-.00043
SDev	.01011	.00246	.00472	.00293	.00707	.02003	.01004
%RSD	251.66	.46270	179.35	10.750	1.2654	3.7573	2314.5

#1	L.01674	.53244	.00140	L.02972	.56075	.55023	L.00745
#2	L.00602	.53441	.00632	L.02838	.56753	.54254	L.00742
#3	L.00067	.52851	.00632	L.02302	.55704	.50451	L-.01353
#4	L-.00736	.53146	-.00353	L.02794	.55061	.53486	L-.00307

Errors	LC Low	LC Pass	NOCHECK	LC Low	LC Pass	LC Pass	LC Low
High	60.000	.60000		60.000	.60000	.60000	.60000
Low	40.000	.40000		40.000	.40000	.40000	.40000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0872	-.02240	-.01058	1.0252	-.00025	2.1556	.51362
SDev	.0541	.00552	.01314	.0057	.00016	.0748	.00550
%RSD	2.5936	24.629	124.28	.55413	66.667	3.4688	1.0708

#1	2.0392	-.02665	-.00848	1.0261	-.00049	2.0913	.52092
#2	2.0940	-.02676	.00179	1.0282	-.00016	2.2081	.51248

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#3	2.0548	-.02103	-.02913	1.0170	-.00016	2.0915	.50760
#4	2.1606	-.01516	-.00648	1.0296	-.00016	2.2315	.51350

Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass
High	2.4000					2.4000	.60000
Low	1.6000					1.6000	.40000

Elem	ZN
Units	ppm
Avge	.52808
SDev	.00115
%RSD	.21814

#1	.52808
#2	.52648
#3	.52859
#4	.52916

Errors	LC Pass
High	.60000
Low	.40000

Method: QUANMET Sample Name: DHM8PF Operator: MTW
 Run Time: 08/22/00 11:51:19
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B__	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00003	.01200	-.02645	-.00544	.05868	.00009	85.596
SDev	.00201	.01058	.01756	.00000	.00039	.00001	.312
%RSD	6445.4	88.138	66.386	.04171	.67212	6.6911	.36450
#1	.00002	.01201	-.02642	-.00544	.05850	.00010	85.159
#2	.00288	.02637	-.04584	-.00544	.05900	.00010	85.601
#3	-.00138	.00840	-.00332	-.00544	.05900	.00008	85.873
#4	-.00140	.00122	-.03022	-.00545	.05820	.00009	85.751
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K__	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00059	-.00072	.00106	.00134	.22899	3.3554	.00087
SDev	.00102	.00070	.00164	.00051	.00084	.1651	.00004
%RSD	172.38	96.877	154.61	37.959	.36621	4.9199	4.7622
#1	-.00029	-.00037	-.00119	.00090	.22916	3.1199	.00085
#2	-.00007	-.00037	.00093	.00178	.22982	3.4257	.00085
#3	.00076	-.00177	.00252	.00178	.22916	3.5001	.00093
#4	.00197	-.00037	.00200	.00090	.22782	3.3761	.00085
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	31.026	.15721	.00496	9.3273	-.00094	.01889	.00518
SDev	.130	.00049	.00472	.0308	.00962	.02727	.01348
%RSD	.42043	.31204	95.079	.32976	1024.0	144.34	260.43
#1	30.835	.15745	.00619	9.2813	-.00890	-.01714	-.00016
#2	31.076	.15745	.00127	9.3398	-.00254	.04353	-.01046
#3	31.130	.15745	.00127	9.3443	.01295	.01318	.01057
#4	31.063	.15647	.01112	9.3438	-.00526	.03600	.02076
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V__
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00256	3.6745	.00574	.13243	-.00508	-.02776	.00162
SDev	.03140	.0029	.01600	.00041	.00027	.08223	.00228
%RSD	1225.7	.07845	279.02	.31187	5.2677	296.25	140.73
#1	-.02780	3.6730	.02831	.13182	-.00508	-.03067	.00012
#2	.04664	3.6788	-.00667	.13256	-.00475	.06274	.00003

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#3	-.00429	3.6731	-.00451	.13276	-.00508	-.13579	.00490
#4	-.00430	3.6730	.00581	.13256	-.00541	-.00732	.00144

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.03114
SDev	.00163
%RSD	5.2335

#1	.03051
#2	.03234
#3	.02914
#4	.03259

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM8VF Operator: MTW
Run Time: 08/22/00 11:54:27
Cmment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00002	.01833	-.01760	.00164	.03207	.00006	87.594
SDev	.00000	.00231	.04112	.00160	.00024	.00006	.299
%RSD	1.1165	12.590	233.66	97.461	.76530	100.000	.34166
#1	.00002	.01740	-.01856	.00370	.03187	.00010	87.319
#2	.00002	.01924	-.05717	-.00011	.03237	-.00003	87.412
#3	.00002	.01568	-.03398	.00189	.03187	.00010	87.655
#4	.00002	.02102	.03931	.00109	.03216	.00010	87.989
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00176	.00069	.00106	.00353	.06971	3.6757	.00036
SDev	.00141	.00176	.00201	.00072	.00159	.3285	.00014
%RSD	80.180	256.21	188.74	20.403	2.2743	8.9363	39.909
#1	.00145	.00104	.00146	.00441	.06872	3.9629	.00049
#2	.00278	-.00176	-.00120	.00265	.07205	3.2025	.00030
#3	.00293	.00243	.00359	.00353	.06938	3.7645	.00019
#4	-.00011	.00104	.00040	.00353	.06872	3.7728	.00046
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.497	.00641	.00124	15.441	.00290	-.00568	.01049
SDev	.049	.00057	.00402	.103	.00304	.02520	.00852
%RSD	.36631	8.8663	323.84	.66467	104.75	443.25	81.218
#1	13.435	.00691	.00617	15.320	.00686	.02848	.02091
#2	13.556	.00592	-.00368	15.550	.00055	-.03231	.01049
#3	13.494	.00691	.00124	15.497	.00370	-.00944	.00004
#4	13.505	.00592	.00124	15.397	.00048	-.00947	.01053
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01353	4.3795	-.01019	.11027	-.00541	.02267	.00003
SDev	.04595	.0125	.01780	.00078	.00027	.03503	.00008
%RSD	339.66	.28566	174.62	.71072	4.9485	154.55	306.22
#1	.02663	4.3621	.00578	.10936	-.00541	-.00652	.00012
#2	-.06739	4.3795	-.00249	.11093	-.00508	-.00653	-.00007

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#3	.02271	4.3853	-.00870	.11093	-.00541	.06353	.00003
#4	-.03606	4.3911	-.03536	.10988	-.00573	.04019	.00002
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.01380
SDev	.00092
%RSD	6.6486

#1	.01279
#2	.01336
#3	.01490
#4	.01413

Errors	LC Pass
High	100.00
Low	-.02000

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F mw
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Method: QUANMET Sample Name: DHM8XE Operator: MTW
 Run Time: 08/22/00 11:57:36
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00123	.01199	-.01671	.02932	.05825	.00006	83.884
SDev	.00072	.01030	.02001	.00893	.00050	.00006	.531
%RSD	58.157	85.877	119.79	30.439	.86272	102.41	.63244
#1	-.00088	.01025	-.01763	.02198	.05850	-.00003	83.129
#2	-.00088	-.00052	-.00212	.04010	.05850	.00010	84.339
#3	-.00086	.02447	-.00239	.03322	.05750	.00008	84.137
#4	-.00231	.01378	-.04468	.02199	.05850	.00010	83.931
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00210	.00032	.00213	.00087	2.5686	7.1489	-.00063
SDev	.00191	.00241	.00231	.00111	.0082	.3262	.00031
%RSD	90.889	748.72	108.68	128.04	.31837	4.5627	48.594
#1	.00099	-.00177	-.00120	-.00068	2.5651	6.6902	-.00103
#2	.00344	.00241	.00306	.00109	2.5778	7.3514	-.00067
#3	.00396	.00241	.00412	.00109	2.5592	7.4092	-.00028
#4	-.00000	-.00177	.00253	.00197	2.5725	7.1448	-.00056
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	42.016	.34330	.00777	5.0104	.00281	.00509	.00782
SDev	.246	.00168	.00472	.0376	.00553	.05295	.01001
%RSD	.58443	.49019	60.676	.75053	196.85	1040.5	128.13
#1	41.972	.34109	.00161	5.0167	-.00260	-.03291	.00003
#2	42.277	.34503	.01147	5.0153	-.00130	-.04038	-.00008
#3	41.699	.34305	.01147	4.9594	.00720	.07343	.01043
#4	42.117	.34404	.00654	5.0502	.00795	.02022	.02089
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02947	3.8974	-.00151	.06835	-.00500	-.00125	.00137
SDev	.02538	.0427	.01317	.00039	.00056	.02783	.00249
%RSD	86.121	1.0945	871.36	.57336	11.199	2231.7	181.27
#1	-.03732	3.8352	-.02055	.06854	-.00573	.02800	.00003
#2	-.01769	3.9278	-.00001	.06854	-.00508	-.03053	.00023

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#3	-.00207	3.9047	.00620	.06776	-.00442	-.01871	.00511
#4	-.06080	3.9220	.00831	.06854	-.00475	.01626	.00013
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.01272
SDev	.00120
%RSD	9.4164

#1	.01183
#2	.01445
#3	.01259
#4	.01201

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM91F

Operator: MTW

Run Time: 08/22/00 12:00:44

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00002	.01566	.00551	-.00382	.02918	.00016	77.296
SDev	.00117	.00822	.01793	.00030	.00024	.00008	.125
%RSD	5251.4	52.537	325.21	7.8302	.81475	49.658	.16205
#1	.00144	.02277	-.00707	-.00367	.02935	.00022	77.109
#2	.00004	.02279	.01215	-.00367	.02885	.00008	77.347
#3	.00002	.00854	.02778	-.00367	.02915	.00022	77.349
#4	-.00141	.00853	-.01081	-.00427	.02935	.00010	77.379
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00024	.00209	.00159	.00089	.10666	2.2397	-.00010
SDev	.00381	.00210	.00067	.00072	.00054	.0865	.00064
%RSD	1562.1	100.54	41.918	80.698	.51003	3.8643	659.99
#1	-.00362	.00105	.00146	.00089	.10667	2.2852	.00019
#2	-.00200	.00384	.00146	.00178	.10733	2.3265	.00065
#3	.00172	.00383	.00093	.00001	.10666	2.2191	-.00048
#4	.00487	-.00037	.00252	.00089	.10600	2.1281	-.00075
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.955	.04749	.00125	2.4458	.00396	.01143	.01832
SDev	.047	.00049	.00402	.0175	.00715	.01567	.02318
%RSD	.23330	1.0377	322.43	.71507	180.41	137.08	126.54
#1	19.953	.04823	.00617	2.4622	-.00012	-.00185	.04175
#2	19.894	.04725	.00125	2.4224	-.00095	.02095	.01044
#3	20.006	.04725	.00125	2.4555	.00246	.02851	-.01044
#4	19.966	.04724	-.00368	2.4430	.01447	-.00189	.03152
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00322	3.9771	-.00142	.08068	-.00483	.00498	.00125
SDev	.04904	.0332	.01401	.00036	.00031	.04370	.00244
%RSD	1523.2	.83571	988.29	.44054	6.4910	877.62	195.71
#1	-.00853	3.9857	-.00234	.08082	-.00442	-.04171	.00012
#2	-.05946	3.9279	.00779	.08056	-.00475	.00493	.00490

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#3	.05415	3.9973	.00975	.08108	-.00508	-.00670	.00003
#4	.02672	3.9973	-.02087	.08025	-.00508	.06340	-.00007
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.01348
SDev	.00110
%RSD	8.1622

#1	.01283
#2	.01231
#3	.01468
#4	.01410

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM94F

Operator: MTW

Run Time: 08/22/00 12:03:52

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00036	.02456	-.02145	.00525	.03086	.00019	84.948
SDev	.00137	.00700	.04633	.00178	.00036	.00006	.212
%RSD	382.89	28.510	215.97	33.894	1.1574	32.993	.24931

#1	.00144	.01742	-.01469	.00781	.03136	.00021	85.199
#2	-.00143	.03348	-.01476	.00378	.03065	.00022	84.798
#3	-.00000	.02094	-.08413	.00500	.03086	.00022	85.046
#4	.00142	.02641	.02776	.00440	.03057	.00010	84.749

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00096	.00139	.00160	.00463	.00980	2.5579	.00179
SDev	.00162	.00134	.00181	.00085	.00038	.2959	.00052
%RSD	168.59	96.099	113.51	18.245	3.9278	11.569	28.737

#1	-.00080	.00244	.00093	.00529	.00947	2.8058	.00140
#2	-.00210	.00244	.00147	.00441	.00947	2.3017	.00148
#3	.00127	.00104	.00412	.00529	.01013	2.8224	.00176
#4	-.00220	-.00035	-.00013	.00353	.01014	2.3017	.00253

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.434	.03124	.00493	8.8511	-.00237	.00954	.02869
SDev	.037	.00049	.00739	.0452	.00302	.02010	.02311
%RSD	.35212	1.5699	149.96	.51070	127.44	210.59	80.544

#1	10.406	.03148	.00123	8.8021	-.00252	.01336	.02085
#2	10.471	.03148	.01108	8.8946	.00164	-.00185	.00004
#3	10.460	.03050	.01108	8.8839	-.00292	.03612	.05211
#4	10.398	.03148	-.00369	8.8236	-.00567	-.00946	.04176

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02157	3.8554	-.00498	.10992	-.00491	.01465	.00101
SDev	.03173	.0100	.02170	.00034	.00042	.03740	.00178
%RSD	147.07	.26051	435.49	.30937	8.6066	255.23	176.31

#1	.04606	3.8642	.01604	.10962	-.00475	-.01748	.00368
#2	.01472	3.8583	-.03542	.10977	-.00541	.04093	.00022

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#3	-.02054	3.8409	-.00025	.11040	-.00508	-.01746	.00022
#4	.04606	3.8583	-.00030	.10988	-.00442	.05262	-.00007

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.01632
SDev	.00079
%RSD	4.8345

#1	.01524
#2	.01677
#3	.01623
#4	.01703

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM94P5F Operator: MTW
Run Time: 08/22/00 12:07:01
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00071	.00668	-.00102	-.00397	.00586	.00010	17.316
SDev	.00184	.00910	.01715	.00153	.00025	.00000	.058
%RSD	258.72	136.20	1682.8	38.448	4.2875	.00000	.33639

#1	.00286	.00663	-.00681	-.00447	.00624	.00010	17.394
#2	.00143	.01033	-.02227	-.00588	.00573	.00010	17.289
#3	-.00000	.01558	.00856	-.00306	.00573	.00010	17.258
#4	-.00143	-.00581	.01645	-.00247	.00573	.00010	17.323

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00045	-.00105	.00173	.00110	-.00001	.95043	-.00024
SDev	.00117	.00268	.00102	.00044	.00175	.23047	.00046
%RSD	260.69	255.75	58.963	39.843	32390.	24.249	189.75

#1	-.00052	-.00174	.00306	.00088	.00149	.90498	-.00036
#2	.00019	.00105	.00093	.00088	.00082	.66530	-.00075
#3	.00060	-.00454	.00199	.00176	.00016	1.2190	.00035
#4	-.00207	.00105	.00093	.00088	-.00250	1.0124	-.00020

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.1094	.00689	.00123	1.7699	-.00116	-.02467	.01563
SDev	.0110	.00000	.00402	.0056	.00253	.02775	.01809
%RSD	.52340	.02154	326.60	.31433	218.21	112.50	115.74

#1	2.1108	.00689	.00616	1.7671	.00192	-.05504	.01037
#2	2.0947	.00688	-.00369	1.7636	-.00342	-.00946	-.00002
#3	2.1108	.00689	.00123	1.7734	-.00012	-.03991	.04174
#4	2.1215	.00689	.00123	1.7756	-.00301	.00574	.01042

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00881	.74416	.00367	.02186	-.00156	.03800	.00003
SDev	.01394	.02428	.00603	.00016	.00049	.07470	.00008
%RSD	158.14	3.2632	164.17	.74632	31.579	196.60	291.90

#1	-.00881	.76008	.01187	.02167	-.00115	-.04083	.00012
#2	-.02057	.75429	.00360	.02178	-.00213	.07593	-.00007

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#3	-.01665	.70796	.00174	.02204	-.00115	.12268	.00003
#4	.01077	.75429	-.00251	.02193	-.00180	-.00578	.00003
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00447
SDev	.00124
%RSD	27.718

#1	.00361
#2	.00363
#3	.00625
#4	.00440

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM94SF Operator: MTW
 Run Time: 08/22/00 12:10:09
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04876	1.9917	2.0021	1.0210	2.0576	.05276	84.206
SDev	.00071	.0086	.0643	.0056	.0036	.00016	.394
%RSD	1.4630	.42971	3.2129	.54769	.17467	.31298	.46816
#1	.04841	1.9805	2.0012	1.0142	2.0589	.05269	83.897
#2	.04983	1.9984	1.9161	1.0210	2.0619	.05282	84.335
#3	.04841	1.9894	2.0706	1.0279	2.0536	.05295	84.708
#4	.04841	1.9983	2.0203	1.0210	2.0561	.05256	83.886
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04383	.50665	.20377	.25446	1.0773	2.4319	.98263
SDev	.00178	.00228	.00115	.00072	.0033	.3249	.00354
%RSD	4.0737	.44926	.56425	.28252	.30691	13.361	.35994
#1	.04585	.50664	.20377	.25446	1.0746	2.3430	.98687
#2	.04278	.50665	.20218	.25534	1.0773	2.2356	.98229
#3	.04194	.50386	.20431	.25446	1.0819	2.2356	.97825
#4	.04473	.50944	.20484	.25358	1.0753	2.9133	.98312
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.361	.53907	.00016	8.7782	.52653	.52658	.00180
SDev	.024	.00203	.00472	.0177	.01268	.01647	.01986
%RSD	.22825	.37627	2927.4	.20221	2.4076	3.1278	1103.3
#1	10.337	.53735	-.00353	8.8043	.52205	.53418	.00699
#2	10.353	.54030	-.00353	8.7704	.54183	.52656	-.01367
#3	10.393	.54129	.00139	8.7731	.53033	.50372	-.01384
#4	10.361	.53735	.00632	8.7650	.51192	.54186	.02772
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0420	3.8561	.00742	1.1379	-.00483	2.0424	.50746
SDev	.0813	.0252	.01034	.0018	.00016	.0683	.00009
%RSD	3.9827	.65462	139.37	.15887	3.3898	3.3453	.01832
#1	2.1213	3.8474	.01412	1.1386	-.00475	1.9636	.50739
#2	1.9490	3.8416	-.00241	1.1400	-.00508	2.0103	.50739

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#3	2.0979	3.8938	-.00036	1.1371	-.00475	2.0804	.50749
#4	1.9999	3.8416	.01833	1.1358	-.00475	2.1154	.50758

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.50400
SDev	.00446
%RSD	.88465

#1	.49787
#2	.50416
#3	.50552
#4	.50845

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM94DF Operator: MTW
 Run Time: 08/22/00 12:13:17
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04876	1.9935	2.0242	1.0108	2.0603	.05289	84.278
SDev	.00136	.0071	.0245	.0205	.0092	.00016	.279
%RSD	2.7919	.35446	1.2080	2.0290	.44852	.31288	.33104
#1	.04984	2.0037	2.0164	1.0210	2.0705	.05308	83.962
#2	.04840	1.9876	2.0474	1.0210	2.0481	.05270	84.164
#3	.04981	1.9913	2.0398	1.0210	2.0609	.05296	84.375
#4	.04698	1.9912	1.9934	.97999	2.0619	.05282	84.611
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04812	.50664	.20364	.25358	1.0861	2.3823	.98391
SDev	.00304	.00360	.00026	.00144	.0015	.1914	.00548
%RSD	6.3210	.71045	.12948	.56820	.13601	8.0337	.55661
#1	.04477	.50804	.20377	.25534	1.0866	2.2852	.99072
#2	.04844	.50525	.20377	.25181	1.0846	2.6488	.97769
#3	.05207	.51081	.20325	.25358	1.0853	2.2108	.98516
#4	.04722	.50245	.20377	.25357	1.0879	2.3843	.98207
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.406	.53711	.00139	8.8591	.52314	.52282	.03049
SDev	.014	.00094	.00402	.0542	.01402	.02194	.01581
%RSD	.13777	.17531	288.53	.61237	2.6805	4.1975	51.847
#1	10.415	.53637	.00139	8.9089	.50637	.50387	.01728
#2	10.385	.53637	.00139	8.7896	.51767	.54174	.01733
#3	10.415	.53735	.00632	8.8946	.53823	.54192	.03847
#4	10.412	.53833	-.00353	8.8432	.53029	.50377	.04889
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0136	3.8460	.00191	1.1390	-.00475	1.9694	.50596
SDev	.0479	.0029	.01792	.0044	.00046	.0965	.00224
%RSD	2.3804	.07498	939.97	.38700	9.7532	4.9018	.44295
#1	2.0469	3.8474	.00801	1.1439	-.00475	1.9051	.50749
#2	1.9725	3.8474	.02445	1.1332	-.00541	1.8701	.50627

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#3	1.9725	3.8474	-.01038	1.1390	-.00442	2.0336	.50270
#4	2.0626	3.8416	-.01444	1.1397	-.00442	2.0686	.50739

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.50492
SDev	.00289
%RSD	.57260

#1	.50319
#2	.50711
#3	.50175
#4	.50761

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-8

Operator: MTW

Run Time: 08/22/00 12:16:26

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0095	50.497	5.2399	5.1223	5.0584	5.2150	52.709
SDev	.0048	.203	.1156	.0236	.0271	.0202	.307
%RSD	.47620	.40184	2.2056	.46055	.53576	.38824	.58267
#1	1.0128	50.529	5.2352	5.1190	5.0570	5.2170	53.121
#2	1.0097	50.287	5.1418	5.0904	5.0291	5.1922	52.650
#3	1.0026	50.409	5.1792	5.1363	5.0529	5.2099	52.379
#4	1.0128	50.763	5.4034	5.1435	5.0946	5.2411	52.685
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.2827	5.1479	5.1072	5.0210	52.954	50.063	4.9141
SDev	.0137	.0206	.0223	.0307	.193	.612	.0314
%RSD	.25904	.40016	.43605	.61161	.36385	1.2225	.63974
#1	5.2999	5.1736	5.1368	5.0105	53.157	49.741	4.8955
#2	5.2678	5.1403	5.0901	4.9884	52.796	49.790	4.8834
#3	5.2770	5.1249	5.0900	5.0236	52.782	49.741	4.9235
#4	5.2863	5.1527	5.1118	5.0616	53.079	50.980	4.9539
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	51.201	5.1204	5.1255	51.231	5.2608	5.1138	5.2443
SDev	.189	.0190	.0232	.318	.0086	.0488	.0385
%RSD	.36938	.37142	.45356	.62089	.16276	.95389	.73492
#1	51.344	5.1428	5.1416	51.050	5.2561	5.1828	5.2700
#2	50.999	5.1083	5.1415	50.939	5.2513	5.1062	5.2284
#3	51.082	5.1014	5.0922	51.275	5.2663	5.0980	5.1975
#4	51.379	5.1290	5.1268	51.659	5.2696	5.0683	5.2811
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.1082	5.1282	5.1367	5.1163	5.0363	10.312	5.1196
SDev	.0840	.0002	.0695	.0264	.0221	.177	.0178
%RSD	1.6438	.00442	1.3539	.51544	.43968	1.7180	.34690
#1	5.2243	5.1285	5.1912	5.1186	5.0508	10.467	5.1398
#2	5.0940	5.1280	5.1767	5.0882	5.0115	10.424	5.1007

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#3	5.0235	5.1281	5.1416	5.1072	5.0242	10.074	5.1095
#4	5.0909	5.1283	5.0371	5.1510	5.0586	10.281	5.1285

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem	ZN
Units	ppm
Avge	4.9977
SDev	.0080
%RSD	.15952

#1	4.9979
#2	4.9889
#3	4.9956
#4	5.0082

Errors	LC Pass
High	5.5000
Low	4.5000

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Method: QUANMET Sample Name: CCB8

Operator: MTW

Run Time: 08/22/00 12:19:34

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00001	.01070	.01723	.00166	.00050	.00050	.01010
SDev	.00203	.00766	.01063	.00229	.00000	.00019	.00155
%RSD	14030.	71.604	61.697	137.56	.00000	38.538	15.381
#1	.00003	.01380	.02778	.00236	.00050	.00034	.00916
#2	.00143	.00851	.00473	.00096	.00050	.00035	.01027
#3	.00145	.01922	.01230	.00438	.00050	.00059	.01221
#4	-.00285	.00126	.02410	-.00104	.00050	.00073	.00874
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00188	.00069	.00199	.00044	.00250	.61158	-.00033
SDev	.00214	.00238	.00226	.00114	.00192	.40519	.00035
%RSD	113.63	343.26	113.16	257.87	76.945	66.253	104.83
#1	.00353	.00383	.00146	.00089	.00083	.99589	-.00048
#2	.00248	-.00036	.00518	.00176	.00083	.83060	.00019
#3	.00278	.00104	.00146	.00000	.00416	.54960	-.00048
#4	-.00126	-.00174	-.00013	-.00088	.00416	.07025	-.00056
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00602	.00098	.00123	.01073	-.00284	-.00188	.00518
SDev	.01177	.00000	.00569	.00315	.00530	.03612	.00601
%RSD	195.42	.20659	461.74	29.364	186.62	1925.0	116.02
#1	.01941	.00099	.00616	.01140	-.00952	.02098	.01032
#2	.01138	.00098	-.00369	.01006	-.00068	.02085	-.00001
#3	-.00736	.00098	-.00369	.01453	-.00410	-.05498	.01045
#4	.00067	.00099	.00616	.00693	.00295	.00564	-.00004
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01273	.01306	.00362	.00036	-.00016	.02331	.00277
SDev	.02351	.01254	.00964	.00025	.00046	.04525	.00250
%RSD	184.73	95.963	266.27	69.261	282.84	194.14	90.220
#1	-.02448	.03047	.01186	.00003	.00016	-.02926	.00500
#2	-.02448	.00725	-.00668	.00030	.00016	.04086	.00116

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#3	-.02447	.01309	-.00252	.00056	-.00016	.00576	.00481
#4	.02254	.00145	.01182	.00056	-.00082	.07588	.00012
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00076
SDev	.00132
%RSD	174.42

#1	-.00105
#2	.00099
#3	.00211
#4	.00098

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHM99F

Operator: MTW

Run Time: 08/22/00 12:22:42

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00001	.01293	.01048	.00610	.02986	.00009	89.048
SDev	.00117	.01433	.01850	.00197	.00058	.00001	.517
%RSD	14861.	110.78	176.58	32.351	1.9436	7.1577	.58029
#1	.00143	.01738	.00853	.00440	.02935	.00010	89.253
#2	.00000	.00855	-.01455	.00439	.03036	.00010	88.704
#3	.00003	.02988	.01992	.00781	.03036	.00008	89.679
#4	-.00143	-.00408	.02800	.00782	.02935	.00010	88.556
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00077	-.00000	.00106	.00154	.00947	2.6984	.00222
SDev	.00125	.00238	.00133	.00084	.00094	.2521	.00103
%RSD	162.89	60258.	124.93	54.605	9.9560	9.3436	46.148
#1	.00075	-.00036	.00093	.00265	.01013	2.7315	.00280
#2	-.00042	.00104	.00146	.00088	.00946	2.6488	.00236
#3	-.00118	.00244	.00252	.00088	.01014	3.0125	.00300
#4	-.00222	-.00314	-.00066	.00176	.00814	2.4009	.00074
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.7558	.00418	.00246	4.5814	-.00020	-.02465	.01308
SDev	.0549	.00049	.00472	.0095	.00693	.02973	.01316
%RSD	.56252	11.777	191.38	.20717	3473.0	120.61	100.61
#1	9.8120	.00492	.00616	4.5907	.00419	-.00946	.03137
#2	9.6835	.00394	-.00369	4.5741	-.00425	-.06257	-.00001
#3	9.7799	.00394	.00616	4.5724	.00699	.00575	.01051
#4	9.7478	.00394	.00123	4.5885	-.00773	-.03232	.01045
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00100	4.1305	-.01481	.11398	-.00557	.04663	.00127
SDev	.02273	.0067	.01330	.00017	.00068	.04811	.00249
%RSD	2263.4	.16146	89.792	.15109	12.245	103.18	196.16
#1	.03431	4.1363	-.01473	.11395	-.00541	.05247	.00012
#2	-.01663	4.1363	-.00254	.11395	-.00639	.05246	-.00007

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#3	-.00487	4.1248	-.00866	.11380	-.00475	.09912	.00500
#4	-.00879	4.1247	-.03331	.11421	-.00573	-.01755	.00002
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00798
SDev	.00026
%RSD	3.3202

#1	.00809
#2	.00758
#3	.00811
#4	.00813

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM9CF Operator: MTW
 Run Time: 08/22/00 12:25:51
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00000	.01561	-.00980	-.00137	.03646	.00016	104.41
SDev	.00202	.00639	.01998	.00122	.00015	.00007	.86
%RSD	44822.	40.889	203.92	89.502	.40535	46.188	.82209
#1	.00000	.01021	-.03388	-.00041	.03639	.00022	103.48
#2	-.00285	.01561	.00853	-.00243	.03639	.00022	103.91
#3	.00143	.02458	.00460	-.00021	.03639	.00010	104.93
#4	.00143	.01206	-.01845	-.00242	.03668	.00010	105.32
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00064	-.00036	.00173	.00176	.02062	2.8203	.00112
SDev	.00089	.00114	.00176	.00125	.00064	.1175	.00086
%RSD	138.65	320.84	102.02	70.607	3.0999	4.1675	76.900
#1	.00031	-.00175	.00359	.00264	.02011	2.7480	.00225
#2	-.00016	.00104	.00200	.00000	.02011	2.7645	.00019
#3	-.00103	-.00036	-.00066	.00176	.02145	2.7728	.00121
#4	-.00168	-.00035	.00199	.00265	.02078	2.9959	.00085
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	15.909	.00394	.00370	3.8483	-.00015	-.00760	.00777
SDev	.077	.00000	.00284	.0142	.00188	.01892	.03755
%RSD	.48148	.02121	76.914	.36998	1245.4	248.96	483.04
#1	15.832	.00394	.00616	3.8389	.00218	.02078	-.02091
#2	15.864	.00394	.00616	3.8523	.00054	-.01707	-.01054
#3	15.936	.00394	.00123	3.8353	-.00182	-.01702	.06264
#4	16.003	.00394	.00123	3.8666	-.00151	-.01709	-.00009
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01268	4.5706	.01444	.12714	-.00631	-.03230	.00007
SDev	.03199	.0067	.01916	.00036	.00049	.07827	.00006
%RSD	252.31	.14630	132.64	.28364	7.7922	242.31	76.719
#1	.01083	4.5648	-.01086	.12681	-.00672	.07573	.00013
#2	-.03619	4.5648	.03028	.12712	-.00672	-.04107	.00012

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#3	.01867	4.5764	.01008	.12697	-.00573	-.05274	.00002
#4	-.04402	4.5764	.02828	.12764	-.00606	-.11112	.00003

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00888
SDev	.00150
%RSD	16.930

#1	.00678
#2	.00966
#3	.01020
#4	.00888

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DHM9DF

Operator: MTW

Run Time: 08/22/00 12:28:59

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00001	.02457	-.05525	-.00126	.03576	.00016	102.63
SDev	.00117	.01036	.02058	.00153	.00044	.00007	.60
%RSD	8999.0	42.148	37.249	121.23	1.2212	45.758	.58345
#1	.00001	.02277	-.03398	-.00182	.03639	.00022	102.91
#2	-.00142	.01202	-.06863	-.00182	.03559	.00010	101.78
#3	.00144	.02637	-.04175	-.00242	.03538	.00009	102.69
#4	.00003	.03712	-.07663	.00100	.03568	.00021	103.15
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00202	.00103	.00226	.00199	.02345	2.6034	.00141
SDev	.00280	.00113	.00102	.00085	.00196	.3134	.00092
%RSD	138.51	109.82	45.003	42.541	8.3645	12.037	65.426
#1	.00331	.00103	.00306	.00265	.02411	2.6075	.00019
#2	-.00203	-.00035	.00093	.00088	.02078	2.2521	.00198
#3	.00430	.00103	.00199	.00177	.02544	2.5414	.00225
#4	.00249	.00243	.00305	.00265	.02344	3.0125	.00123
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	15.552	.00296	.00247	3.7746	-.00009	-.00186	.01825
SDev	.088	.00000	.00472	.0138	.00254	.01861	.01003
%RSD	.56449	.05457	191.21	.36669	2684.3	999.18	54.946
#1	15.607	.00296	.00616	3.7772	.00007	-.01705	.01032
#2	15.467	.00296	.00616	3.7897	.00343	-.01708	.01044
#3	15.489	.00296	.00124	3.7562	-.00211	.00574	.03131
#4	15.647	.00296	-.00369	3.7754	-.00177	.02093	.02092
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01279	4.4983	.00782	.12477	-.00606	.02311	.00158
SDev	.02158	.0371	.01796	.00079	.00046	.05436	.00222
%RSD	168.66	.82498	229.82	.63363	7.6444	235.24	140.92
#1	-.00875	4.4838	.03449	.12555	-.00606	.09902	.00013
#2	-.00092	4.4722	.00162	.12420	-.00639	.01732	.00012

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#3	.02259	4.4838	-.00034	.12399	-.00541	-.02946	.00125
#4	.03826	4.5533	-.00450	.12534	-.00639	.00556	.00481

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.04900
SDev	.00098
%RSD	1.9986

#1	.04893
#2	.04893
#3	.05026
#4	.04787

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM9EF

Operator: MTW

Run Time: 08/22/00 12:32:08

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00144	.04692	-.00334	.00820	.12572	.00009	47.676
SDev	.00118	.01018	.04307	.00071	.00077	.00001	.129
%RSD	81.490	21.704	1289.0	8.5997	.61164	7.2688	.27121
#1	.00288	.03530	.00828	.00785	.12554	.00008	47.797
#2	.00143	.05855	.05063	.00926	.12475	.00010	47.614
#3	.00145	.04241	-.04964	.00786	.12655	.00009	47.769
#4	.00000	.05144	-.02264	.00785	.12605	.00010	47.524
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00198	-.00145	.00266	.06965	.02745	1.3203	.00572
SDev	.00101	.00238	.00140	.00072	.00054	.1792	.00075
%RSD	51.173	164.48	52.550	1.0342	1.9784	13.574	13.165
#1	-.00198	-.00040	.00359	.07053	.02679	1.5744	.00669
#2	-.00337	-.00179	.00146	.06877	.02812	1.1942	.00553
#3	-.00096	-.00459	.00412	.06965	.02745	1.3182	.00580
#4	-.00163	.00099	.00146	.06965	.02745	1.1942	.00487
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8.0855	.01181	-.00123	2.6420	.00318	-.00383	.02874
SDev	.0445	.00000	.00284	.0233	.00484	.01999	.02320
%RSD	.55045	.00731	231.72	.88045	152.20	522.33	80.723
#1	8.1063	.01181	-.00369	2.6437	.00825	.01332	.06273
#2	8.0500	.01181	.00124	2.6285	.00631	.01321	.02090
#3	8.1384	.01181	-.00369	2.6740	-.00171	-.02480	.01041
#4	8.0474	.01181	.00124	2.6217	-.00013	-.01705	.02090
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00972	4.7371	.00426	.13411	-.00295	.02021	.00211
SDev	.04355	.0355	.00930	.00078	.00057	.01993	.00246
%RSD	447.97	.75009	218.37	.58168	19.245	98.584	116.41
#1	.05002	4.7618	.01212	.13391	-.00246	.04063	.00481
#2	-.04008	4.7096	.00987	.13339	-.00278	.01731	.00003

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#3	-.04400	4.7734	.00366	.13522	-.00377	-.00605	.00359
#4	-.00482	4.7038	-.00862	.13391	-.00278	.02897	.00003
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.01114
SDev	.00084
%RSD	7.4958

#1	.01041
#2	.01064
#3	.01122
#4	.01228

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHP5XF

Operator: MTW

Run Time: 08/22/00 12:35:16

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00076	.04769	-.02275	.00796	.00930	.00013	85.348
SDev	.00143	.00743	.00832	.01856	.00029	.00007	.251
%RSD	186.91	15.575	36.584	233.28	3.1208	55.314	.29445
#1	.00005	.04592	-.01888	-.00245	.00905	.00007	85.113
#2	.00005	.04939	-.03435	-.00105	.00955	.00007	85.443
#3	.00005	.03879	-.02268	.03576	.00905	.00020	85.177
#4	.00291	.05665	-.01511	-.00045	.00955	.00020	85.658
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00192	.00174	.00186	.00177	.00714	2.3389	.00433
SDev	.00232	.00241	.00091	.00072	.00067	.2617	.00032
%RSD	120.78	138.41	48.919	40.895	9.3405	11.191	7.4433
#1	.00222	-.00035	.00199	.00088	.00681	2.5166	.00393
#2	-.00058	.00105	.00146	.00176	.00681	2.2191	.00421
#3	.00110	.00105	.00093	.00176	.00680	2.0290	.00459
#4	.00493	.00522	.00306	.00265	.00814	2.5910	.00459
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.869	.00836	.00739	6.3737	-.00011	.00383	.01307
SDev	.020	.00057	.00739	.0233	.00668	.01291	.01787
%RSD	.15801	6.7843	99.986	.36606	5860.6	337.13	136.79
#1	12.843	.00885	.00123	6.3768	-.00130	.02084	.01050
#2	12.889	.00788	.01601	6.4032	.00912	-.00186	.03135
#3	12.862	.00787	.00123	6.3469	-.00143	.00572	.02093
#4	12.881	.00886	.01108	6.3679	-.00685	-.00939	-.01051
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00880	3.3908	-.00762	.20122	-.00491	.06411	.00990
SDev	.03199	.0265	.01185	.00056	.00042	.06396	.00014
%RSD	363.65	.78109	155.37	.28046	8.6066	99.767	1.4475
#1	-.02447	3.3720	-.02099	.20070	-.00508	.08749	.00978
#2	-.01663	3.4299	.00787	.20201	-.00475	-.01762	.01006

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#3	.03822	3.3778	-.00861	.20122	-.00541	.13419	.00978
#4	-.03230	3.3836	-.00876	.20096	-.00442	.05240	.00997

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00569
SDev	.00086
%RSD	15.179

#1	.00630
#2	.00626
#3	.00575
#4	.00445

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHP61F

Operator: MTW

Run Time: 08/22/00 12:38:25

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00071	.02057	-.00790	.00148	.00970	.00010	27.323
SDev	.00082	.00513	.03513	.00393	.00010	.00000	.104
%RSD	116.62	24.913	444.74	264.96	1.0663	.00000	.37907
#1	-.00001	.02458	.03163	.00098	.00975	.00010	27.250
#2	.00142	.02461	-.01082	-.00385	.00975	.00010	27.425
#3	.00142	.01389	.00084	.00380	.00955	.00010	27.218
#4	-.00001	.01921	-.05324	.00501	.00975	.00010	27.398
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00027	-.00070	.00066	.00154	.01314	2.1963	-.00075
SDev	.00279	.00070	.00134	.00044	.00159	.2153	.00000
%RSD	1026.6	100.35	201.41	28.553	12.065	9.8047	.00000
#1	-.00276	-.00034	.00040	.00088	.01214	1.9298	-.00075
#2	.00174	-.00175	.00252	.00176	.01148	2.4505	-.00075
#3	.00253	-.00036	-.00067	.00176	.01481	2.1612	-.00075
#4	-.00259	-.00034	.00040	.00176	.01414	2.2438	-.00075
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.140	.05140	-.00123	2.5614	.00062	.00946	.00525
SDev	.065	.00049	.00284	.0236	.00489	.03588	.02495
%RSD	.49174	.95510	231.31	.92175	790.71	379.46	475.35
#1	13.057	.05115	.00123	2.5449	-.00370	-.01711	-.01052
#2	13.143	.05214	-.00369	2.5623	-.00240	.01320	-.01046
#3	13.143	.05115	-.00369	2.5440	.00721	.05883	.04193
#4	13.215	.05115	.00123	2.5945	.00137	-.01710	.00005
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.02151	1.1481	-.00818	.02548	-.00197	-.02320	-.00002
SDev	.02938	.0000	.01664	.00023	.00033	.02781	.00005
%RSD	136.57	.00000	203.32	.88997	16.667	119.88	242.43
#1	.01081	1.1481	.01383	.02544	-.00213	-.01735	.00002
#2	-.00487	1.1481	-.00466	.02559	-.00213	-.00565	-.00007

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#3	-.04012	1.1481	-.02291	.02518	-.00147	-.00570	-.00007
#4	-.05187	1.1481	-.01899	.02570	-.00213	-.06408	.00002

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00690
SDev	.00113
%RSD	16.304

#1	.00626
#2	.00811
#3	.00568
#4	.00756

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHP63F

Operator: MTW

Run Time: 08/22/00 12:41:33

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00056	.01607	-.00190	-.00460	.04531	.00010	97.074
SEv	.00297	.00982	.04935	.00001	.00025	.00015	.546
%RSD	529.52	61.145	2603.5	.13506	.55456	153.96	.56199
#1	-.00128	.00850	.02712	-.00461	.04493	.00022	97.051
#2	.00301	.02461	-.02704	-.00460	.04543	-.00003	96.331
#3	-.00413	.00667	-.05779	-.00460	.04543	.00022	97.610
#4	.00015	.02449	.05013	-.00460	.04543	-.00003	97.303
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00204	-.00001	.00080	.00027	.66769	2.9422	-.00059
SEv	.00123	.00134	.00329	.00085	.00345	.4484	.00026
%RSD	60.269	17235.	411.83	308.55	.51699	15.239	44.349
#1	-.00256	.00104	.00465	.00094	.66453	3.5497	-.00075
#2	-.00286	-.00175	-.00332	.00005	.66520	2.5001	-.00048
#3	-.00251	.00104	.00146	.00094	.67185	2.9711	-.00086
#4	-.00021	-.00036	.00040	-.00083	.66919	2.7480	-.00028
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	22.962	.03438	.00379	2.4995	.00111	-.00961	.02872
SEv	.120	.00049	.00636	.0232	.01380	.04468	.02746
%RSD	.52425	1.4338	167.61	.92916	1244.7	464.71	95.637
#1	22.922	.03364	.00133	2.4666	-.01936	.02080	.05207
#2	22.839	.03462	-.00359	2.5069	.00680	-.03999	.05234
#3	23.126	.03462	.00626	2.5212	.00616	-.05514	-.00005
#4	22.960	.03462	.01118	2.5033	.01083	.03587	.01050
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00804	4.3650	-.00074	.10089	-.00598	.01373	.00007
SEv	.04706	.0374	.02413	.00048	.00056	.07766	.00013
%RSD	585.69	.85638	3239.8	.47275	9.3579	565.42	167.00
#1	-.01490	4.3274	-.02478	.10037	-.00541	-.08258	.00003
#2	-.05799	4.3390	-.00218	.10063	-.00573	.03421	-.00008

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#3	.05564	4.4027	.03251	.10141	-.00672	.10418	.00012
#4	-.01489	4.3911	-.00853	.10115	-.00606	-.00087	.00022
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .00508
SDev .00062
%RSD 12.120

#1 .00416
#2 .00539
#3 .00539
#4 .00539

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DHP65F

Operator: MTW

Run Time: 08/22/00 12:44:41

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B__	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00001	.01513	-.01755	-.00059	.05305	.00018	105.21
SD	.00002	.00641	.03727	.00141	.00030	.00006	.30
%RSD	115.29	42.326	212.40	240.15	.56920	32.301	.28689
#1	.00003	.01016	.01622	-.00044	.05347	.00021	105.61
#2	-.00000	.01204	-.04159	.00097	.05297	.00010	105.24
#3	.00003	.02447	.01224	-.00043	.05277	.00021	105.06
#4	.00000	.01387	-.05705	-.00244	.05297	.00022	104.91
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K__	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00108	.00103	.00199	.06172	.01046	4.6592	.00675
SD	.00095	.00197	.00115	.00072	.00207	.1221	.00050
%RSD	88.086	192.13	57.597	1.1637	19.781	2.6205	7.3950
#1	.00016	.00243	.00040	.06084	.01080	4.6654	.00713
#2	.00079	-.00176	.00199	.06260	.00747	4.6406	.00647
#3	.00241	.00242	.00306	.06172	.01213	4.8141	.00721
#4	.00097	.00103	.00253	.06172	.01146	4.5166	.00619
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.911	.01181	.00616	7.7068	.00540	.00004	.01571
SD	.028	.00000	.00569	.0334	.00538	.02001	.01349
%RSD	.17724	.01868	92.355	.43279	99.645	51487.	85.854
#1	15.939	.01181	.01108	7.7432	.00721	.02096	.03138
#2	15.917	.01181	.00123	7.7267	.01089	-.01713	.00007
#3	15.917	.01181	.01108	7.6748	-.00191	.01334	.01043
#4	15.872	.01181	.00123	7.6824	.00542	-.01702	.02095
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V__
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01368	4.5764	-.00915	.24761	-.00606	.07000	.00256
SD	.03075	.0000	.01302	.00039	.00027	.05600	.00292
%RSD	224.70	.00078	142.36	.15826	4.4135	80.008	114.19
#1	-.03621	4.5765	-.00445	.24794	-.00639	.02909	.00509
#2	-.04405	4.5764	.00567	.24794	-.00606	.09926	.00003

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#3	.01472	4.5765	-.02509	.24716	-.00606	.13418	.00510
#4	.01080	4.5764	-.01272	.24742	-.00573	.01746	.00003

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
 Units ppm
 Avge .05916
 SDev .00146
 %RSD 2.4613

#1	.05865
#2	.05807
#3	.06131
#4	.05863

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHP69F

Operator: MTW

Run Time: 08/22/00 12:47:50

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00033	.01112	.00560	.00249	.03302	.00012	92.744
SEv	.00137	.00536	.02717	.00196	.00041	.00006	.338
%RSD	410.19	48.219	484.85	78.736	1.2405	54.890	.36417
#1	.00002	.00661	.00467	.00441	.03266	.00008	92.397
#2	.00145	.01741	.03546	.00159	.03266	.00021	93.208
#3	-.00140	.01374	-.03012	.00380	.03337	.00008	92.685
#4	-.00141	.00671	.01241	.00017	.03337	.00009	92.685
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00279	-.00036	-.00027	.00705	.01413	2.3596	.00070
SEv	.00293	.00113	.00165	.00072	.00172	.1388	.00082
%RSD	104.89	312.48	612.76	10.199	12.176	5.8819	118.04
#1	-.00156	-.00175	-.00120	.00705	.01479	2.2191	.00167
#2	.00434	-.00037	.00199	.00794	.01612	2.2934	.00093
#3	.00469	-.00037	-.00173	.00705	.01213	2.5414	.00046
#4	.00370	.00103	-.00014	.00617	.01346	2.3843	-.00028
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.025	.01648	.00000	7.8725	-.00374	-.00572	-.00521
SEv	.073	.00049	.00472	.0685	.00299	.00981	.01348
%RSD	.60480	2.9875	223260.	.87032	79.990	171.57	258.92
#1	11.925	.01673	.00123	7.7848	-.00480	-.01716	-.02087
#2	12.019	.01574	-.00369	7.8514	-.00390	-.00191	.01046
#3	12.080	.01673	.00616	7.9238	.00041	.00565	-.01042
#4	12.077	.01672	-.00369	7.9301	-.00664	-.00946	.00000
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01955	4.2058	-.00976	.11732	-.00614	-.03511	.00457
SEv	.03205	.0000	.00522	.00061	.00056	.04317	.00066
%RSD	163.93	.00018	53.449	.51981	9.1084	122.94	14.465
#1	-.01661	4.2059	-.01702	.11667	-.00639	-.06431	.00490
#2	.01865	4.2059	-.00866	.11698	-.00541	-.01763	.00481

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#3	-.02054	4.2059	-.00876	.11761	-.00606	.01745	.00499
#4	-.05971	4.2058	-.00460	.11802	-.00672	-.07598	.00359

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.01646
SDev	.00150
%RSD	9.1279

#1	.01811
#2	.01493
#3	.01732
#4	.01548

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHP6DF

Operator: MTW

Run Time: 08/22/00 12:50:58

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00069	.01958	.00456	.00255	.03332	.00011	92.201
SDev	.00082	.00673	.05130	.00233	.00042	.00006	.517
%RSD	119.94	34.357	1124.9	91.425	1.2699	55.789	.56023
#1	.00003	.01734	.07791	-.00042	.03287	.00021	91.726
#2	-.00140	.01202	-.04169	.00441	.03388	.00008	92.082
#3	.00003	.02805	-.01095	.00179	.03337	.00008	92.061
#4	-.00140	.02092	-.00703	.00441	.03317	.00008	92.937
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00015	-.00001	.00186	.00926	.01779	2.4153	.00073
SDev	.00137	.00133	.00170	.00051	.00128	.2029	.00048
%RSD	919.85	18195.	91.516	5.4935	7.1650	8.4018	65.460
#1	-.00186	-.00175	.00306	.00970	.01679	2.5166	.00104
#2	.00041	.00104	.00359	.00970	.01812	2.6488	.00027
#3	.00136	-.00036	.00040	.00882	.01679	2.2108	.00123
#4	-.00050	.00104	.00040	.00882	.01945	2.2852	.00038
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.103	.01230	.00370	8.0047	.00175	.00190	.01307
SDev	.069	.00057	.00284	.0182	.00205	.01583	.03002
%RSD	.57255	4.6242	76.926	.22755	116.80	833.39	229.63
#1	12.056	.01181	.00123	7.9850	-.00026	-.00193	.02087
#2	12.139	.01181	.00123	8.0275	.00122	-.01709	-.03134
#3	12.035	.01279	.00616	7.9967	.00145	.00570	.03134
#4	12.182	.01279	.00616	8.0096	.00460	.02092	.03143
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00779	4.2985	-.00454	.11774	-.00557	.02029	.00495
SDev	.01643	.0000	.01521	.00054	.00042	.01994	.00005
%RSD	210.90	.00000	335.15	.46163	7.5941	98.285	1.0423
#1	.01474	4.2985	.00372	.11698	-.00573	-.00597	.00491
#2	-.02444	4.2985	.00553	.11813	-.00606	.02903	.00491

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#3	-.00877	4.2985	-.00035	.11772	-.00508	.04074	.00500
#4	-.01268	4.2985	-.02705	.11813	-.00541	.01734	.00500

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.01262
SDev	.00102
%RSD	8.0671

#1	.01336
#2	.01204
#3	.01359
#4	.01149

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-9

Operator: MTW

Run Time: 08/22/00 12:54:07

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mcd: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0128	50.430	5.2208	5.0947	5.0362	5.2281	53.315
SDev	.0037	.412	.0244	.0474	.0585	.0436	.168
%RSD	.36584	.81660	.46670	.93021	1.1611	.83447	.31468

#1	1.0143	50.670	5.2223	5.1264	5.0673	5.2567	53.240
#2	1.0097	50.009	5.1982	5.0312	4.9822	5.1842	53.119
#3	1.0173	50.879	5.2085	5.1351	5.1029	5.2734	53.492
#4	1.0098	50.162	5.2542	5.0863	4.9923	5.1979	53.410

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.3335	5.1914	5.1416	4.9995	53.020	49.968	4.8445
SDev	.0299	.0189	.0225	.0555	.313	.314	.0795
%RSD	.56057	.36457	.43764	1.1102	.59061	.62917	1.6420

#1	5.3405	5.1916	5.1469	5.0343	53.122	50.071	4.8900
#2	5.2989	5.1779	5.1113	4.9487	52.671	50.121	4.7768
#3	5.3703	5.2180	5.1655	5.0590	53.400	50.179	4.9332
#4	5.3242	5.1778	5.1427	4.9558	52.888	49.501	4.7778

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	51.258	5.1381	5.1415	50.953	5.3325	5.1150	5.2237
SDev	.500	.0269	.0134	.674	.0273	.0269	.0604
%RSD	.97587	.52372	.26023	1.3235	.51173	.52538	1.1556

#1	51.467	5.1468	5.1366	51.347	5.3276	5.0922	5.2706
#2	50.790	5.1073	5.1316	50.391	5.3390	5.1528	5.1353
#3	51.864	5.1704	5.1613	51.700	5.3646	5.1003	5.2500
#4	50.910	5.1280	5.1366	50.375	5.2987	5.1149	5.2389

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.1132	5.1371	5.2275	5.1253	5.0336	10.360	5.1343
SDev	.0602	.0260	.0599	.0546	.0387	.193	.0295
%RSD	1.1770	.50578	1.1449	1.0661	.76934	1.8647	.57530

#1	5.1302	5.1286	5.2693	5.1535	5.0534	10.105	5.1519
#2	5.0428	5.1164	5.1599	5.0737	4.9938	10.379	5.0994

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#3	5.1857	5.1751	5.1952	5.1881	5.0776	10.382	5.1646
#4	5.0943	5.1282	5.2857	5.0860	5.0095	10.575	5.1215

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem	ZN
Units	ppm
Avge	5.0129
SDev	.0225
%RSD	.44785

#1	5.0082
#2	4.9904
#3	5.0440
#4	5.0090

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB9 Operator: MTW
Run Time: 08/22/00 12:57:15
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00037	.01154	-.01943	.00216	.00030	.00041	.00985
SDev	.00137	.00393	.02804	.00268	.00024	.00016	.00260
%RSD	371.05	34.061	144.27	123.93	80.991	40.459	26.358
#1	.00003	.01729	.01618	.00437	.00000	.00021	.00777
#2	-.00143	.01023	-.01070	.00096	.00050	.00035	.00791
#3	.00143	.01025	-.03771	-.00105	.00050	.00048	.01045
#4	.00145	.00840	-.04550	.00438	.00021	.00059	.01328
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00229	-.00070	.00253	.00110	.00033	.66117	-.00115
SDev	.00194	.00134	.00157	.00044	.00220	.05503	.00042
%RSD	84.685	189.78	61.983	40.105	662.92	8.3229	36.926
#1	.00365	.00104	.00412	.00176	-.00250	.63224	-.00103
#2	.00044	-.00035	.00306	.00088	.00083	.61572	-.00067
#3	.00424	-.00176	.00040	.00088	.00016	.65704	-.00169
#4	.00082	-.00175	.00252	.00088	.00283	.73968	-.00122
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00201	.00049	.00493	.01151	-.00508	-.02277	.01036
SDev	.00953	.00057	.00472	.00529	.00154	.04816	.01206
%RSD	474.54	115.04	95.736	45.991	30.396	211.48	116.43
#1	.00602	.00000	.01108	.01587	-.00548	-.00946	-.00011
#2	-.00201	.00099	.00616	.00514	-.00348	.03605	.02078
#3	-.01540	.00098	.00123	.00916	-.00432	-.03989	-.00007
#4	.00335	.00000	.00123	.01587	-.00705	-.07779	.02082
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01469	.00148	.00005	.00003	-.00033	.05253	.00254
SDev	.02250	.02366	.00701	.00043	.00042	.05311	.00285
%RSD	153.16	1598.8	14133.	1233.8	129.10	101.09	112.12
#1	.01860	.00730	-.00873	-.00049	.00016	.08756	.00510
#2	-.02057	-.03330	.00575	.00003	-.00049	.04087	.00012

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#3	-.02840	.01882	.00565	.00003	-.00082	.09927	.00002
#4	-.02840	.01309	-.00247	.00056	-.00016	-.01757	.00490
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00113
SDev	.00089
%RSD	78.882

#1	.00048
#2	.00045
#3	.00123
#4	.00235

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHP6HF

Operator: MTW

Run Time: 08/22/00 13:06:13

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00035	.01560	-.00691	.00555	.03108	.00012	83.538
SDev	.00072	.00925	.03819	.00296	.00030	.00007	.755
%RSD	204.92	59.274	552.38	53.426	.97141	53.272	.90438
#1	-.00000	.00484	-.04926	.00781	.03065	.00010	82.669
#2	.00000	.01917	-.01464	.00500	.03116	.00010	84.450
#3	.00003	.02635	-.00706	.00781	.03136	.00008	83.766
#4	-.00143	.01205	.04331	.00157	.03116	.00022	83.266
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00096	.00069	.00199	.00331	.00930	2.4029	.00079
SDev	.00068	.00209	.00137	.00085	.00191	.3123	.00092
%RSD	70.501	304.19	68.749	25.573	20.573	12.998	115.88
#1	.00087	-.00175	.00146	.00264	.00680	1.9629	-.00028
#2	.00010	-.00036	.00040	.00265	.01080	2.4009	.00112
#3	.00172	.00243	.00359	.00441	.01080	2.6488	.00187
#4	.00115	.00243	.00253	.00353	.00880	2.5992	.00046
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.663	.01156	.00493	7.4871	.00273	-.00757	.00780
SDev	.064	.00049	.00246	.0237	.00822	.00954	.01978
%RSD	.54506	4.2519	49.983	.31714	301.51	126.00	253.47
#1	11.590	.01181	.00616	7.4549	-.00479	-.00951	.02078
#2	11.724	.01181	.00616	7.5117	-.00225	.00569	.02083
#3	11.630	.01181	.00123	7.4875	.01363	-.00942	.01057
#4	11.708	.01082	.00616	7.4943	.00431	-.01704	-.02097
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.05580	4.0335	.01136	.10973	-.00491	.02915	.00132
SDev	.02073	.0318	.01722	.00069	.00063	.03932	.00239
%RSD	37.151	.78955	151.65	.63112	12.766	134.90	181.51
#1	-.07540	4.0031	.00782	.10873	-.00541	.05256	.00012
#2	-.05188	4.0784	.00371	.11030	-.00475	.05250	.00012

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#3	-.06755	4.0263	-.00250	.11003	-.00410	.04077	.00491
#4	-.02838	4.0263	.03639	.10988	-.00541	-.02924	.00012
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00664
SDev	.00091
%RSD	13.712

#1	.00603
#2	.00571
#3	.00730
#4	.00754

Errors	LC Pass
High	100.00
Low	-.02000

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Analysis Report

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Method: QUANMET Sample Name: DHP6LF

Operator: MTW

Run Time: 08/22/00 13:09:21

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00003	.34465	-.01062	.00405	.01041	.00015	76.286
SDev	.00233	.00525	.03328	.00283	.00017	.00007	.461
%RSD	7056.2	1.5234	313.27	70.013	1.6402	50.555	.60414
#1	.00003	.34290	-.00579	.00365	.01055	.00021	76.238
#2	.00289	.33928	-.01348	.00787	.01026	.00008	76.334
#3	-.00282	.34465	.02894	.00364	.01026	.00021	75.724
#4	.00003	.35178	-.05217	.00103	.01055	.00008	76.849
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00285	-.00000	.00199	.00111	.03776	2.1199	.00102
SDev	.00186	.00070	.00189	.00084	.00207	.1455	.00058
%RSD	65.318	13986.	94.904	76.390	5.4843	6.8643	56.537
#1	.00038	-.00035	.00199	.00177	.03943	2.2273	.00074
#2	.00268	-.00035	.00359	.00177	.03876	2.1777	.00159
#3	.00481	-.00036	-.00066	.00000	.03476	1.9050	.00035
#4	.00352	.00104	.00306	.00089	.03810	2.1695	.00140
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14.845	.00886	.01109	7.0599	.00008	-.00968	.01563
SDev	.046	.00080	.00402	.0459	.00642	.01640	.01809
%RSD	.31122	9.0756	36.270	.65041	8503.2	169.42	115.79
#1	14.860	.00886	.00616	7.0634	-.00774	-.02488	-.00011
#2	14.777	.00886	.01109	7.0075	.00132	-.00966	.03127
#3	14.865	.00788	.01109	7.1188	-.00108	-.01726	.03132
#4	14.878	.00985	.01601	7.0500	.00781	.01309	.00002
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01263	3.5544	-.00555	.11368	-.00475	.02882	.00509
SDev	.03460	.0075	.01094	.00047	.00060	.06674	.00008
%RSD	273.91	.21034	196.95	.41289	12.591	231.61	1.5438
#1	.01088	3.5630	.00568	.11369	-.00508	.02880	.00500
#2	.02263	3.5515	.00171	.11302	-.00410	-.05293	.00510

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#3	-.03615	3.5457	-.01267	.11395	-.00541	.02885	.00509
#4	-.04789	3.5572	-.01693	.11406	-.00442	.11055	.00519
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00358
SDev	.00135
%RSD	37.655

#1	.00234
#2	.00549
#3	.00310
#4	.00338

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DHM9E RAW Operator: MTW
 Run Time: 08/22/00 13:12:30
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00107	.08899	-.00459	-.00265	.01199	.00016	5.1199
SDev	.00214	.00816	.02768	.00124	.00015	.00007	.0160
%RSD	199.50	9.1674	602.84	46.605	1.2330	45.835	.31208
#1	-.00143	.08000	-.01513	-.00445	.01177	.00010	5.1366
#2	.00286	.08902	.02339	-.00245	.01206	.00010	5.1171
#3	.00286	.09974	.01171	-.00185	.01206	.00022	5.1268
#4	.00000	.08719	-.03834	-.00185	.01206	.00022	5.0991
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00006	.00104	.00293	.00992	.00882	.68803	-.00075
SDev	.00186	.00279	.00176	.00085	.00122	.29238	.00000
%RSD	3307.0	267.95	60.049	8.5145	13.793	42.496	.00000
#1	-.00082	-.00314	.00093	.00970	.00815	.30166	-.00075
#2	-.00123	.00244	.00465	.01058	.00948	.72316	-.00075
#3	.00281	.00243	.00412	.01058	.01015	1.0124	-.00075
#4	-.00054	.00244	.00200	.00882	.00749	.71489	-.00075
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.82877	.00148	.00246	.29568	.00267	-.01140	.00520
SDev	.00857	.00057	.00246	.00348	.00594	.02513	.01352
%RSD	1.0344	38.423	99.941	1.1775	222.08	220.45	259.83
#1	.82007	.00197	.00123	.29389	.00014	-.03995	.01045
#2	.82274	.00099	.00123	.29880	-.00213	-.01707	-.01049
#3	.83613	.00197	.00123	.29836	.01131	.02090	.02091
#4	.83613	.00099	.00616	.29165	.00137	-.00947	-.00006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01859	.49804	.00516	.01318	-.00033	.00575	.00036
SDev	.04345	.00989	.01624	.00015	.00057	.03440	.00060
%RSD	233.79	1.9860	314.45	1.1443	173.21	598.82	166.65
#1	-.01271	.48790	-.01279	.01331	-.00049	.04082	.00003
#2	-.01663	.49369	-.00261	.01305	-.00082	.01740	.00003

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#3	.03039	.49950	.02424	.01305	.00049	-.04099	.00125
#4	-.07540	.51106	.01182	.01331	-.00049	.00575	.00012
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00911
SDev	.00032
%RSD	3.5617

#1	.00939
#2	.00939
#3	.00881
#4	.00884

Errors	LC Pass
High	100.00
Low	-.02000

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Analysis Report

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Method: QUANMET Sample Name: DHM9EF RAW Operator: MTW
 Run Time: 08/22/00 13:15:38
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00036	.03483	.10390	.00452	.12786	.00012	51.941
SDev	.00072	.00644	.02898	.00058	.00124	.00007	.558
%RSD	200.21	18.493	27.893	12.844	.97239	54.094	1.0737
#1	-.00000	.03354	.12806	.00437	.12877	.00022	52.081
#2	-.00000	.04423	.08937	.00376	.12806	.00010	52.576
#3	.00000	.03170	.12805	.00498	.12605	.00009	51.229
#4	.00145	.02986	.07011	.00497	.12856	.00008	51.879
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00116	.00099	.00239	.07053	-.00168	1.5042	.00477
SDev	.00306	.00228	.00101	.00125	.00064	.2779	.00060
%RSD	263.40	230.06	42.094	1.7703	38.022	18.478	12.473
#1	.00240	.00098	.00306	.07141	-.00118	1.2934	.00553
#2	-.00196	.00379	.00306	.07142	-.00118	1.9133	.00495
#3	-.00021	-.00180	.00093	.06877	-.00184	1.4174	.00421
#4	-.00488	.00100	.00252	.07053	-.00251	1.3926	.00440
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.6499	.01279	.00493	2.7272	-.00145	.01330	.00780
SDev	.0852	.00000	.00472	.0168	.00297	.02705	.04462
%RSD	.98449	.01156	95.748	.61513	204.68	203.46	572.02
#1	8.6874	.01279	.00123	2.7375	-.00425	-.00190	-.01045
#2	8.6766	.01279	.01108	2.7165	.00236	.03620	.06261
#3	8.5240	.01279	.00123	2.7098	-.00061	-.01711	.02091
#4	8.7115	.01279	.00616	2.7451	-.00331	.03599	-.04185
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00686	5.1121	-.00560	.13797	-.00369	.04970	.00162
SDev	.03819	.0445	.01581	.00116	.00016	.06207	.00231
%RSD	556.62	.87016	282.27	.84257	4.4444	124.90	142.47
#1	.00685	5.1382	-.02315	.13831	-.00377	.06430	.00003
#2	.01861	5.1324	.00801	.13763	-.00344	-.04082	.00022

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#3	.01077	5.0455	-.01478	.13659	-.00377	.07600	.00124
#4	-.06367	5.1324	.00752	.13935	-.00377	.09931	.00500

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00753
SDev	.00135
%RSD	17.888

#1	.00780
#2	.00933
#3	.00649
#4	.00650

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-10 Operator: MTW
Run Time: 08/22/00 13:18:47
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99687	49.885	5.1666	5.0514	4.9971	5.1832	52.292
SDev	.00670	.133	.0607	.0387	.0126	.0074	.443
%RSD	.67237	.26645	1.1758	.76604	.25238	.14202	.84759
#1	.99353	49.753	5.2329	5.0377	4.9824	5.1810	52.012
#2	.99213	49.863	5.2010	5.0364	5.0005	5.1797	52.002
#3	1.0068	50.070	5.1014	5.1086	5.0124	5.1941	52.941
#4	.99506	49.854	5.1313	5.0229	4.9930	5.1781	52.214
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.2505	5.1086	5.0565	4.9674	52.235	49.532	4.8137
SDev	.0102	.0291	.0298	.0031	.261	.539	.0084
%RSD	.19352	.57001	.58858	.06267	.49888	1.0884	.17461
#1	5.2476	5.0818	5.0411	4.9689	52.066	49.666	4.8207
#2	5.2468	5.1013	5.0332	4.9636	52.078	48.914	4.8134
#3	5.2654	5.1501	5.0996	4.9707	52.618	50.195	4.8020
#4	5.2423	5.1014	5.0523	4.9662	52.176	49.352	4.8187
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.710	5.0572	5.0355	50.698	5.2748	5.0125	5.0884
SDev	.178	.0290	.0283	.033	.0639	.0813	.0108
%RSD	.35072	.57360	.56249	.06500	1.2120	1.6210	.21282
#1	50.586	5.0363	5.0330	50.671	5.1976	4.9607	5.0825
#2	50.616	5.0402	5.0330	50.720	5.2492	5.0067	5.0831
#3	50.972	5.0994	5.0725	50.669	5.3398	5.1292	5.0833
#4	50.664	5.0530	5.0035	50.733	5.3127	4.9536	5.1046
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.0269	5.0550	5.1396	5.0936	4.9688	10.176	5.0593
SDev	.0558	.0332	.0542	.0136	.0193	.258	.0236
%RSD	1.1103	.65722	1.0547	.26677	.38812	2.5376	.46562
#1	5.0490	5.0345	5.0980	5.0804	4.9554	10.152	5.0412
#2	5.0608	5.0404	5.1165	5.0926	4.9597	9.8832	5.0461

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#3	5.0544	5.1047	5.2192	5.1125	4.9974	10.157	5.0933
#4	4.9435	5.0405	5.1248	5.0890	4.9627	10.513	5.0565

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem	ZN
Units	ppm
Avge	4.9197
SDev	.0256
%RSD	.52071

#1	4.9063
#2	4.9079
#3	4.9581
#4	4.9065

Errors	LC Pass
High	5.5000
Low	4.5000

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Method: QUANMET Sample Name: CCB10

Operator: MTW

Run Time: 08/22/00 13:21:55

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00036	.01248	-.01843	.00513	.00010	.00032	.00151
SD	.00137	.00806	.05850	.00760	.00012	.00012	.00415
%RSD	383.30	64.557	317.35	148.26	115.47	38.297	276.02
#1	-.00000	.01204	.03561	.00438	.00021	.00022	-.00196
#2	-.00143	.00307	-.04537	.01564	.00021	.00022	-.00038
#3	.00143	.01203	-.08790	.00297	.00000	.00035	.00087
#4	.00143	.02276	.02393	-.00247	.00000	.00048	.00749
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00053	-.00000	.00146	-.00022	-.00034	.57026	-.00115
SD	.00155	.00349	.00578	.00084	.00157	.26657	.00069
%RSD	293.51	935450.	394.61	382.58	469.44	46.745	60.389
#1	-.00140	-.00453	-.00013	-.00000	-.00250	.20248	-.00216
#2	.00213	-.00035	.00519	-.00088	-.00050	.69010	-.00094
#3	.00001	.00105	.00678	.00088	.00083	.82233	-.00056
#4	.00137	.00384	-.00598	-.00088	.00083	.56613	-.00094
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00201	.00049	.00493	.00648	.00191	.01516	-.00783
SD	.00901	.00057	.00620	.00487	.00636	.02726	.01562
%RSD	448.87	115.51	125.84	75.127	332.00	179.82	199.64
#1	-.01272	-.00000	-.00369	.00335	-.00001	.02069	-.03126
#2	-.00469	.00000	.00616	.00246	-.00473	.03603	-.00009
#3	.00067	.00099	.00616	.00693	.00192	-.02463	-.00008
#4	.00870	.00099	.01108	.01319	.01048	.02854	.00012
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.03918	.00579	-.01287	.00008	-.00066	.05839	.00010
SD	.03638	.00290	.01358	.00012	.00019	.06773	.00012
%RSD	92.858	50.000	105.51	152.64	28.868	116.00	120.39
#1	.00685	.00724	-.02942	-.00001	-.00082	.01758	-.00007
#2	-.02840	.00145	-.01489	.00003	-.00049	-.00583	.00013

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#3	-.07541	.00724	.00360	.00003	-.00082	.14596	.00013
#4	-.05974	.00724	-.01078	.00025	-.00049	.07587	.00020

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00112
SDev	.00067
%RSD	59.950

#1	.00099
#2	.00023
#3	.00175
#4	.00150

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHP2EB

Operator: MTW

Run Time: 08/22/00 13:25:04

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00036	.01922	.01720	.01047	.00013	.00013	.14600
SDev	.00137	.00527	.01949	.01609	.00025	.00006	.00365
%RSD	381.12	27.420	113.29	153.65	200.00	50.000	2.5001

#1	-.00143	.01380	-.00687	-.00447	.00000	.00010	.14091
#2	.00143	.02460	.03935	.03174	.00050	.00010	.14823
#3	.00000	.01570	.02399	.00096	.00000	.00010	.14587
#4	.00143	.02277	.01235	.01364	.00000	.00022	.14901

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00157	.00139	.00253	.00154	.00632	.82853	-.00124
SDev	.00205	.00175	.00217	.00085	.00227	.02646	.00097
%RSD	130.66	125.90	85.912	54.688	35.864	3.1936	78.218

#1	.00040	-.00035	.00040	.00088	.00349	.78927	-.00149
#2	.00340	.00104	.00093	.00088	.00815	.83886	.00019
#3	.00319	.00383	.00412	.00177	.00549	.83886	-.00196
#4	-.00072	.00105	.00465	.00265	.00816	.84712	-.00169

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00602	.00025	.00370	.01721	-.00051	-.00756	.00259
SDev	.01467	.00049	.00284	.00587	.00956	.02430	.01320
%RSD	243.43	197.76	76.958	34.131	1864.4	321.58	510.12

#1	.01138	.00000	.00616	.01721	-.00521	-.02468	.00000
#2	.00335	.00099	.00123	.01497	.00898	.02849	.02093
#3	-.01272	.00000	.00123	.01140	-.01158	-.01699	-.01055
#4	.02209	.00000	.00616	.02525	.00575	-.01705	-.00003

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00292	.03619	-.00718	-.00035	-.00057	-.00883	.00008
SDev	.04575	.00000	.02401	.00005	.00056	.03737	.00006
%RSD	1565.7	.00000	334.63	15.217	97.590	423.04	72.142

#1	-.03623	.03619	-.03954	-.00038	-.00115	-.04090	.00012
#2	.04214	.03619	.01397	-.00038	-.00049	-.04096	.00003

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#3	.03038	.03619	-.01083	-.00027	-.00082	.01743	.00003
#4	-.04797	.03619	.00771	-.00038	.00016	.02910	.00013

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00580
SDev	.00040
%RSD	6.9422

#1	.00549
#2	.00599
#3	.00628
#4	.00545

Errors	LC Pass
High	.02000
Low	-.02000

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Method: QUANMET Sample Name: DHP2EC

Operator: MTW

Run Time: 08/22/00 13:28:13

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04726	1.9486	1.9718	.97821	1.9723	.05184	51.702
SD	.00137	.0105	.0480	.00198	.0087	.00017	.197
%RSD	2.9103	.53867	2.4360	.20238	.44046	.32748	.38073
#1	.04546	1.9522	1.9941	.97650	1.9664	.05172	51.800
#2	.04691	1.9344	1.9092	.97649	1.9704	.05184	51.729
#3	.04831	1.9484	2.0211	.97992	1.9671	.05172	51.418
#4	.04836	1.9593	1.9630	.97992	1.9850	.05208	51.860
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass
High	.06000	2.4000	2.4000		2.4000	.06000	60.000
Low	.04000	1.6000	1.6000		1.6000	.04000	40.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04740	.49566	.20208	.24563	1.0416	48.805	.95552
SD	.00420	.00648	.00247	.00125	.0044	.462	.00631
%RSD	8.8697	1.3066	1.2220	.50854	.41954	.94572	.66044
#1	.04979	.49531	.20301	.24387	1.0401	48.129	.95227
#2	.04505	.50230	.20195	.24652	1.0447	48.939	.94927
#3	.04282	.48696	.19876	.24562	1.0361	49.170	.95676
#4	.05196	.49808	.20461	.24651	1.0454	48.980	.96379
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.06000	.60000	.24000	.30000	1.2000	60.000	
Low	.04000	.40000	.16000	.20000	.80000	40.000	
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.405	.49562	1.0013	50.257	.52244	.48694	L.34218
SD	.163	.00294	.0106	.228	.00464	.02500	.02316
%RSD	.32292	.59221	1.0626	.45325	.88885	5.1353	6.7693
#1	50.388	.49636	1.0013	50.071	.52767	.51914	L.31866
#2	50.230	.49439	.99634	50.152	.51884	.48142	L.32918
#3	50.378	.49243	1.0160	50.220	.52502	.48863	L.37094
#4	50.624	.49931	.99141	50.586	.51823	.45856	L.34994
Errors	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass	LC Low
High	60.000	.60000		60.000	.60000	.60000	.60000
Low	40.000	.40000		40.000	.40000	.40000	.40000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9724	9.8685	2.0148	1.0108	.97205	2.0223	.49176
SD	.0951	.0497	.0403	.0038	.00336	.1392	.00421
%RSD	4.8197	.50390	2.0025	.37660	.34537	6.8852	.85595
#1	1.9959	9.8526	2.0357	1.0089	.97156	2.0924	.48901
#2	2.0547	9.8584	2.0029	1.0098	.97091	1.8237	.49257

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#3	1.8352	9.8236	1.9641	1.0082	.96894	2.1392	.48807
#4	2.0037	9.9395	2.0564	1.0164	.97680	2.0339	.49736
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass
High	2.4000					2.4000	.60000
Low	1.6000					1.6000	.40000
Elem	ZN						
Units	ppm						
Avge	.48481						
SDev	.00297						
%RSD	.61296						
#1	.48256						
#2	.48205						
#3	.48651						
#4	.48812						
Errors	LC Pass						
High	.60000						
Low	.40000						

Method: QUANMET Sample Name: DHMJE

Operator: MTW

Run Time: 08/22/00 13:31:26

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00078	.75165	.07273	.66015	.03307	.00033	23.571
SDev	.00071	.00948	.02650	.01710	.00024	.00001	.132
%RSD	91.285	1.2615	36.429	2.5904	.74204	1.9451	.56006
#1	.00114	.74050	.03421	.65161	.03317	.00033	23.631
#2	.00113	.75127	.07667	.65158	.03287	.00034	23.374
#3	.00115	.75115	.09201	.68580	.03337	.00033	23.627
#4	-.00029	.76369	.08805	.65161	.03287	.00033	23.652
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00128	.00172	.00754	.05162	.49764	432.15	.02922
SDev	.00280	.00180	.00134	.00051	.00472	3.73	.00000
%RSD	217.67	104.67	17.780	.98722	.94792	.86202	.00000
#1	.00257	.00241	.00567	.05118	.50080	434.19	.02922
#2	.00261	.00381	.00887	.05206	.49082	428.17	.02922
#3	-.00290	-.00037	.00780	.05117	.49814	429.98	.02922
#4	.00287	.00101	.00780	.05206	.50080	436.26	.02922
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	18.435	5.8753	.15276	H627.89	.02857	-.00429	.02339
SDev	.151	.0372	.00246	5.84	.00728	.03299	.01569
%RSD	.82086	.63377	1.6119	.92958	25.498	769.78	67.099
#1	18.483	5.8943	.14907	H630.64	.03377	-.01756	.01042
#2	18.231	5.8244	.15400	H621.78	.01822	-.03269	.01023
#3	18.434	5.8726	.15400	H624.49	.02871	-.01002	.03118
#4	18.592	5.9100	.15400	H634.66	.03358	.04313	.04174
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00817	16.082	.00019	.28005	.00508	.02102	.15289
SDev	.02458	.094	.01302	.00244	.00071	.05052	.00242
%RSD	300.92	.58414	7026.3	.86968	13.937	240.37	1.5833
#1	-.01141	16.149	.00372	.28143	.00410	-.00228	.15403
#2	-.01144	15.958	-.00450	.27751	.00573	.02081	.14926

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#3	.01600	16.062	.01614	.27855	.00541	-.02570	.15413
#4	.03952	16.161	-.01462	.28273	.00508	.09124	.15413
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .01923
SDev .00151
%RSD 7.8488

#1 .01926
#2 .02029
#3 .02028
#4 .01708

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DHMJEP5 Operator: MTW
 Run Time: 08/22/00 13:34:40
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00101	.16655	-.00295	.11862	.00694	.00024	4.8237
SDev	.00294	.00591	.02629	.00162	.00014	.00006	.0251
%RSD	292.55	3.5489	891.54	1.3693	2.0094	26.495	.51962
#1	.00422	.17244	-.03965	.11882	.00695	.00027	4.8534
#2	.00137	.16348	-.00101	.11741	.00704	.00027	4.8345
#3	-.00292	.15981	.00676	.11742	.00704	.00014	4.7980
#4	.00136	.17046	.02211	.12085	.00674	.00027	4.8087
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00013	-.00175	.00890	.01081	.10236	86.436	.00085
SDev	.00232	.00342	.00257	.00084	.00139	.330	.00032
%RSD	1833.7	195.53	28.865	7.8116	1.3546	.38127	37.363
#1	.00208	.00104	.00518	.01147	.10269	86.361	.00104
#2	-.00317	.00105	.01103	.01059	.10069	86.882	.00038
#3	.00024	-.00315	.00943	.00970	.10202	86.089	.00093
#4	.00136	-.00594	.00997	.01146	.10402	86.411	.00104
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.8232	1.2055	.03449	126.54	.01327	.03966	-.00007
SDev	.0191	.0046	.00472	.25	.00603	.01323	.03722
%RSD	.50019	.37968	13.672	.19420	45.446	33.345	51113.
#1	3.8245	1.2099	.03080	126.43	.01522	.05874	.03132
#2	3.8486	1.2090	.03080	126.89	.01007	.03595	-.00006
#3	3.8165	1.2011	.03573	126.32	.00703	.02818	-.05237
#4	3.8031	1.2021	.04065	126.53	.02076	.03578	.02082
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01932	3.1927	.01183	.05810	.00066	.02305	.03024
SDev	.04236	.0082	.00940	.00024	.00042	.02522	.00057
%RSD	219.28	.25672	79.470	.41108	64.550	109.43	1.8866
#1	.01888	3.1927	.02225	.05835	.00115	.04641	.02986
#2	-.01639	3.2043	-.00050	.05825	.00049	-.01197	.03109

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#3	-.07907	3.1869	.01159	.05798	.00016	.02304	.02996
#4	-.00071	3.1869	.01398	.05783	.00082	.03472	.03006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00544
SDev	.00054
%RSD	9.9193

#1	.00496
#2	.00576
#3	.00500
#4	.00602

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMJES Operator: MTW
 Run Time: 08/22/00 13:37:49
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04801	2.8514	2.0936	1.6321	1.9520	.05106	75.822
SDev	.00117	.0144	.0721	.0086	.0095	.00018	.371
%RSD	2.4456	.50459	3.4455	.52569	.48834	.34807	.48894
#1	.04657	2.8344	2.0031	1.6243	1.9427	.05082	75.279
#2	.04799	2.8453	2.0725	1.6286	1.9470	.05120	76.087
#3	.04802	2.8595	2.1302	1.6314	1.9646	.05119	76.025
#4	.04945	2.8666	2.1687	1.6442	1.9536	.05106	75.896
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04641	.49637	.20192	.29791	1.5384	493.65	.98409
SDev	.00117	.00606	.00234	.00196	.0103	2.15	.00609
%RSD	2.5295	1.2211	1.1577	.65822	.66988	.43566	.61939
#1	.04616	.48836	.19926	.29503	1.5240	491.38	.98100
#2	.04814	.49532	.20458	.29857	1.5440	492.50	.97819
#3	.04570	.50229	.20298	.29945	1.5474	496.25	.99224
#4	.04565	.49951	.20086	.29857	1.5380	494.46	.98494
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	68.393	6.4022	1.1516	H698.14	.53209	.51312	.54818
SDev	.295	.0288	.0094	3.88	.00749	.03934	.02256
%RSD	.43146	.44931	.81906	.55536	1.4081	7.6678	4.1146
#1	67.981	6.3601	1.1442	H695.15	.53668	.49583	.53779
#2	68.538	6.4162	1.1442	H695.24	.53612	.54911	.52732
#3	68.659	6.4241	1.1540	H703.36	.52093	.46586	.54809
#4	68.394	6.4083	1.1639	H698.80	.53464	.54169	.57954
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0432	H26.901	2.0446	1.2750	.97214	1.9326	.63940
SDev	.0390	.151	.0116	.0054	.00421	.0707	.00298
%RSD	1.9079	.56214	.56597	.42244	.43279	3.6603	.46617
#1	2.0128	H26.707	2.0533	1.2688	.96665	1.9209	.63682
#2	2.0207	H26.956	2.0532	1.2734	.97189	2.0027	.63683

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#3	2.0991	H27.066	2.0430	1.2817	.97680	1.8392	.64189
#4	2.0403	H26.875	2.0288	1.2760	.97320	1.9677	.64207

Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.50282
SDev	.00415
%RSD	.82559

#1	.49794
#2	.50343
#3	.50799
#4	.50191

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMJED

Operator: MTW

Run Time: 08/22/00 13:41:02

Cmment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mde: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04657	2.8390	2.0851	1.6092	1.9521	.05101	75.145
SDev	.00202	.0251	.0210	.0256	.0172	.00033	.338
%RSD	4.3430	.88304	1.0062	1.5938	.88047	.64887	.45009
#1	.04370	2.8327	2.1151	1.5964	1.9508	.05083	74.816
#2	.04799	2.8115	2.0690	1.5964	1.9309	.05070	74.966
#3	.04800	2.8399	2.0725	1.5964	1.9537	.05107	75.591
#4	.04658	2.8720	2.0838	1.6477	1.9730	.05145	75.207
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04402	.49255	.20006	.30672	1.5353	489.15	.98566
SDev	.00462	.00601	.00069	.00490	.0052	4.31	.01223
%RSD	10.495	1.2209	.34382	1.5990	.33913	.88069	1.2411
#1	.03864	.48419	.19926	.30473	1.5353	488.60	.98596
#2	.04453	.49257	.19979	.30209	1.5280	483.95	.97285
#3	.04985	.49811	.20033	.30650	1.5387	489.59	.98174
#4	.04307	.49532	.20086	.31355	1.5394	494.45	1.0021
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	67.875	6.3252	1.1454	H692.55	.52969	.53008	.53515
SDev	.465	.0304	.0152	7.31	.01205	.01300	.02738
%RSD	.68531	.48016	1.3313	1.0556	2.2750	2.4528	5.1160
#1	67.713	6.3031	1.1442	H692.80	.51997	.54125	.54816
#2	67.325	6.2952	1.1245	H684.10	.52200	.54142	.49610
#3	68.045	6.3542	1.1540	H691.39	.54647	.51885	.53779
#4	68.415	6.3483	1.1590	H701.91	.53031	.51878	.55855
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0471	H26.591	2.0369	1.2709	.96567	1.9031	.63440
SDev	.0426	.138	.0353	.0099	.00669	.1090	.00307
%RSD	2.0810	.51888	1.7330	.78138	.69254	5.7266	.48352
#1	2.0599	H26.481	2.0061	1.2699	.96337	1.8622	.63194
#2	2.0481	H26.475	2.0100	1.2583	.95780	1.7804	.63156

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#3	2.0912	H26.649	2.0800	1.2732	.96796	2.0375	.63701
#4	1.9894	H26.759	2.0513	1.2823	.97353	1.9323	.63710

Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.51053
SDev	.00739
%RSD	1.4485

#1	.50792
#2	.50266
#3	.51126
#4	.52027

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMJT Operator: MTW
Run Time: 08/22/00 13:44:16
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00161	4.3297	.05093	.51272	.05701	.00034	61.341
SDev	.00143	.0181	.01787	.00070	.00034	.00016	.161
%RSD	88.746	.41762	35.084	.13674	.58716	48.210	.26284
#1	-.00232	4.3091	.03474	.51300	.05679	.00028	61.210
#2	-.00233	4.3235	.07317	.51167	.05750	.00053	61.542
#3	-.00233	4.3342	.03834	.51309	.05679	.00015	61.400
#4	.00053	4.3520	.05748	.51311	.05699	.00041	61.210
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00101	.00539	.01838	.07752	10.166	609.01	.03884
SDev	.00205	.00176	.00320	.00102	.026	2.21	.00055
%RSD	202.13	32.623	17.422	1.3163	.25907	.36247	1.4141
#1	.00252	.00364	.01426	.07663	10.127	606.86	.03814
#2	.00119	.00783	.02117	.07840	10.172	608.02	.03878
#3	-.00193	.00504	.01745	.07664	10.177	609.14	.03900
#4	.00227	.00503	.02064	.07840	10.187	612.01	.03946
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	25.194	17.202	.16652	H541.29	.03182	-.01246	.02002
SDev	.056	.042	.00247	2.82	.00947	.01896	.02703
%RSD	.22351	.24537	1.4802	.52016	29.757	152.14	135.00
#1	25.137	17.139	.16529	H539.16	.04323	.01598	.03055
#2	25.265	17.227	.16529	H539.04	.02082	-.02192	-.01142
#3	25.209	17.226	.16529	H541.95	.02865	-.02192	.05139
#4	25.164	17.217	.17022	H545.00	.03459	-.02199	.00958
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00260	15.790	-.00399	.48013	.10181	.01214	.02763
SDev	.03261	.052	.01906	.00185	.00056	.03853	.00005
%RSD	1254.4	.32719	477.30	.38506	.54958	317.39	.18425
#1	.04529	15.713	.02173	.47859	.10107	-.01408	.02760
#2	-.00944	15.806	-.00311	.47874	.10173	-.02575	.02761

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#3	-.02118	15.817	-.02336	.48068	.10205	.05595	.02761
#4	-.02507	15.823	-.01123	.48251	.10238	.03245	.02771

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .11695
SDev .00102
%RSD .86894

#1 .11738
#2 .11558
#3 .11797
#4 .11685

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DHMK5

Operator: MTW

Run Time: 08/22/00 13:47:29

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00051	.36623	.06252	.44872	.01106	.00018	61.600
SDev	.00144	.00943	.03215	.00407	.00041	.00006	.364
%RSD	280.85	2.5755	51.432	.90730	3.7114	31.847	.59030
#1	-.00124	.35824	.02309	.44322	.01106	.00010	61.126
#2	-.00121	.35808	.09244	.45008	.01106	.00020	61.829
#3	-.00124	.37614	.08469	.44868	.01055	.00022	61.510
#4	.00165	.37243	.04986	.45291	.01156	.00020	61.934
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00256	-.00106	.00481	.01027	1.6607	609.52	.03978
SDev	.00115	.00267	.00424	.00051	.0090	1.85	.00094
%RSD	44.728	251.37	88.127	4.9541	.54120	.30284	2.3559
#1	-.00169	.00103	.00734	.00983	1.6498	607.90	.04029
#2	-.00339	-.00176	.00096	.00983	1.6598	607.99	.03842
#3	-.00370	-.00455	.00149	.01071	1.6612	610.73	.03993
#4	-.00147	.00103	.00946	.01071	1.6718	611.47	.04048
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	41.319	1.0941	.09999	390.49	.00845	.02403	.00991
SDev	.100	.0040	.00697	1.36	.00192	.03637	.01909
%RSD	.24197	.37009	6.9667	.34955	22.711	151.38	192.60
#1	41.201	1.0894	.09999	389.77	.00624	-.02521	.02036
#2	41.295	1.0943	.10492	388.92	.01029	.04300	.03086
#3	41.337	1.0933	.09014	391.70	.00746	.02010	-.01094
#4	41.442	1.0993	.10492	391.57	.00979	.05821	-.00063
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01319	11.387	-.00584	.31595	.01016	-.04896	.00499
SDev	.05936	.044	.01974	.00127	.00042	.05822	.00363
%RSD	450.03	.38762	338.18	.40154	4.1645	118.91	72.777
#1	.07780	11.323	-.02479	.31471	.00966	-.13353	.00195
#2	.03474	11.410	-.01653	.31523	.01032	-.04021	.00812

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#3	-.06320	11.393	-.00234	.31628	.01065	-.01681	.00174
#4	.00343	11.422	.02031	.31758	.00999	-.00530	.00814

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.03168
SDev	.00093
%RSD	2.9204

#1	.03215
#2	.03216
#3	.03214
#4	.03030

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DHMK9

Operator: MTW

Run Time: 08/22/00 13:50:38

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00092	.37381	.05859	.44708	.01060	.00014	60.485
SDev	.00082	.00591	.02568	.00857	.00010	.00007	.337
%RSD	89.510	1.5810	43.828	1.9176	.97561	52.189	.55688
#1	.00163	.36704	.07312	.45405	.01055	.00021	59.997
#2	.00163	.37256	.02290	.43495	.01055	.00021	60.546
#3	.00021	.38137	.05755	.45206	.01076	.00008	60.758
#4	.00021	.37426	.08077	.44724	.01055	.00008	60.641
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00071	.00138	.00455	.01556	1.6430	600.43	.04069
SDev	.00224	.00133	.00254	.00153	.0068	2.74	.00048
%RSD	313.19	96.797	55.969	9.8107	.41634	.45623	1.1809
#1	.00179	.00102	.00521	.01776	1.6339	598.17	.04103
#2	-.00077	.00242	.00787	.01512	1.6419	598.18	.04103
#3	-.00024	.00242	.00255	.01512	1.6492	603.73	.04068
#4	-.00363	-.00036	.00255	.01424	1.6472	601.64	.04001
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	40.888	1.0975	.10368	379.47	.02667	.00895	.03094
SDev	.176	.0043	.00739	1.67	.01122	.03127	.01215
%RSD	.43032	.38991	7.1258	.43965	42.065	349.51	39.284
#1	40.716	1.0914	.10984	378.12	.03721	.03551	.04147
#2	40.807	1.0983	.09506	378.00	.01083	-.02518	.02037
#3	41.126	1.1012	.10984	381.34	.02843	-.01001	.02046
#4	40.904	1.0992	.09999	380.40	.03022	.03546	.04147
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00253	11.243	.00505	.31123	.00942	.00667	.00689
SDev	.02341	.069	.01342	.00142	.00031	.06396	.00014
%RSD	926.21	.61142	266.05	.45656	3.3302	958.44	2.0350
#1	-.03193	11.161	-.00826	.31012	.00934	-.01662	.00701
#2	.02293	11.236	.00808	.31038	.00966	.01836	.00673

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#3	.00728	11.248	.02246	.31325	.00966	-.06344	.00700
#4	-.00839	11.329	-.00209	.31116	.00901	.08840	.00681
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.03244
SDev	.00081
%RSD	2.5078

#1	.03226
#2	.03213
#3	.03362
#4	.03176

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DHMKE

Operator: MTW

Run Time: 08/22/00 13:53:47

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00064	47.247	.07124	.77388	.56852	.00292	H609.43
SDev	.00185	.057	.06438	.00359	.00153	.00001	4.52
%RSD	287.82	.12087	90.367	.46387	.26959	.43721	.74104

#1	-.00146	47.177	.11187	.77618	.56930	.00293	H605.14
#2	.00000	47.299	-.01665	.77245	.57010	.00293	H605.97
#3	-.00269	47.224	.12602	.77738	.56659	.00290	H612.68
#4	.00159	47.288	.06372	.76951	.56809	.00291	H613.92

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00001	.04441	.09778	.20989	88.403	191.84	.10362
SDev	.00214	.00209	.00165	.00070	.352	.52	.00145
%RSD	40404.	4.7118	1.6838	.33292	.39761	.27255	1.3971

#1	.00138	.04267	.09551	.21074	88.029	191.74	.10290
#2	.00062	.04267	.09764	.20987	88.181	192.59	.10579
#3	-.00316	.04547	.09924	.20903	88.653	191.68	.10298
#4	.00119	.04685	.09871	.20992	88.748	191.36	.10281

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	149.68	1.5908	.04031	H592.42	.09968	.17719	.01475
SDev	.25	.0071	.00846	2.54	.00478	.04382	.03461
%RSD	.16733	.44763	20.984	.42841	4.7982	24.730	234.61

#1	149.34	1.5825	.02917	H593.07	.09495	.16972	.04080
#2	149.76	1.5875	.03905	H595.72	.09656	.18469	-.03219
#3	149.68	1.5945	.04897	H590.13	.10529	.23032	.04091
#4	149.94	1.5985	.04406	H590.76	.10192	.12404	.00949

Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.14123	H68.580	.03284	5.0209	.83634	.20411	.14114
SDev	.05808	.208	.03524	.0076	.00238	.12331	.00481
%RSD	41.124	.30370	107.30	.15040	.28496	60.413	3.4100

#1	-.16866	H68.332	.07091	5.0155	.83396	.27218	.13727
#2	-.19569	H68.495	-.00954	5.0304	.83527	.27064	.13746

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#3	-.06124	H68.692	.01965	5.0142	.83658	.25404	.14741
#4	-.13934	H68.802	.05033	5.0234	.83953	.01956	.14244
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	1.3602
SDev	.0072
%RSD	.52997

#1	1.3511
#2	1.3609
#3	1.3687
#4	1.3600

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-11 Operator: MTW
Run Time: 08/22/00 13:57:00
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0128	50.630	5.2210	5.1052	5.0783	5.2698	53.295
SDev	.0036	.148	.0660	.0225	.0059	.0220	.320
%RSD	.35772	.29282	1.2644	.44121	.11636	.41654	.60085
#1	1.0114	50.602	5.1537	5.1158	5.0765	5.2649	53.332
#2	1.0158	50.804	5.2790	5.0888	5.0870	5.2945	53.523
#3	1.0158	50.665	5.2763	5.1319	5.0740	5.2773	53.494
#4	1.0083	50.447	5.1750	5.0845	5.0758	5.2423	52.832
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.3479	5.1836	5.1486	5.0479	52.950	50.307	4.8616
SDev	.0192	.0208	.0296	.0085	.220	.332	.0163
%RSD	.35879	.40102	.57454	.16924	.41518	.66049	.33448
#1	5.3459	5.1763	5.1570	5.0369	52.926	50.708	4.8554
#2	5.3431	5.2056	5.1693	5.0572	53.153	50.055	4.8647
#3	5.3742	5.1944	5.1634	5.0466	53.069	50.451	4.8440
#4	5.3282	5.1582	5.1049	5.0510	52.651	50.013	4.8824
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.574	5.1236	5.1267	51.441	5.3940	5.1299	5.2295
SDev	.138	.0237	.0282	.103	.0438	.0497	.0306
%RSD	.26686	.46278	.54972	.20006	.81234	.96962	.58487
#1	51.473	5.1260	5.1267	51.378	5.4262	5.1904	5.2401
#2	51.698	5.1428	5.1416	51.572	5.3710	5.1304	5.2604
#3	51.687	5.1359	5.1514	51.343	5.4349	5.1302	5.2296
#4	51.438	5.0896	5.0873	51.472	5.3438	5.0686	5.1878
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1591	5.1749	5.2424	5.1905	5.0422	10.162	5.1472
SDev	.1058	.0438	.0394	.0073	.0153	.182	.0169
%RSD	2.0504	.84626	.75120	.14155	.30298	1.7896	.32781
#1	5.1140	5.1923	5.2712	5.1873	5.0396	10.236	5.1493
#2	5.2948	5.2097	5.2507	5.2008	5.0596	10.116	5.1557

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#3	5.1810	5.1866	5.2629	5.1901	5.0465	10.362	5.1608
#4	5.0467	5.1109	5.1847	5.1838	5.0229	9.9349	5.1229
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem	ZN
Units	ppm
Avge	5.0001
SDev	.0166
%RSD	.33124

#1	4.9975
#2	5.0218
#3	4.9995
#4	4.9816

Errors	LC Pass
High	5.5000
Low	4.5000

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Method: QUANMET Sample Name: CCB11

Operator: MTW

Run Time: 08/22/00 14:00:09

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00143	.02010	-.02140	.00232	.00028	.00057	.01637
SDev	.00118	.01150	.03158	.00234	.00015	.00029	.00258
%RSD	82.726	57.242	147.60	101.24	52.631	50.447	15.760

#1	.00143	.00669	.01249	.00296	.00021	.00048	.01485
#2	.00288	.03344	-.03027	.00438	.00021	.00047	.01949
#3	.00143	.02456	-.00695	-.00106	.00021	.00035	.01374
#4	-.00002	.01570	-.06086	.00298	.00050	.00100	.01740

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00209	.00139	.00306	.00088	.00300	.63431	-.00070
SDev	.00097	.00070	.00328	.00072	.00362	.20616	.00041
%RSD	46.481	50.170	107.12	81.491	120.89	32.502	58.813

#1	.00279	.00244	.00253	.00088	.00083	.60745	-.00028
#2	.00067	.00104	.00784	.00176	.00283	.73142	-.00122
#3	.00261	.00104	.00093	.00088	.00017	.83886	-.00083
#4	.00230	.00104	.00093	.00000	.00815	.35951	-.00048

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00536	.00099	.00493	.01821	.00057	-.00374	.01822
SDev	.01205	.00000	.00246	.00886	.00605	.02656	.01790
%RSD	225.00	.03632	49.985	48.643	1055.3	709.89	98.245

#1	-.00469	.00099	.00616	.01408	.00404	.03610	-.00009
#2	-.00201	.00099	.00616	.02704	.00337	-.01703	.02082
#3	.02209	.00099	.00616	.00782	-.00849	-.01704	.01033
#4	.00602	.00099	.00123	.02391	.00337	-.01700	.04182

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01078	.01159	.00779	.00027	-.00008	.01456	.00041
SDev	.03838	.00993	.02161	.00028	.00068	.07591	.00354
%RSD	355.98	85.738	277.36	101.04	824.62	521.43	872.77

#1	.04212	.00724	.03647	.00014	-.00082	.00582	.00012
#2	-.03623	.02468	.00985	.00025	.00082	.08751	.00501

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#3	.04212	.01303	-.00046	.00003	-.00016	.05254	.00012
#4	-.00488	.00140	-.01470	.00066	-.00016	-.08764	-.00363

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00098
SDev	.00045
%RSD	45.907

#1	.00043
#2	.00153
#3	.00101
#4	.00096

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHMJEF

Operator: MTW

Run Time: 08/22/00 14:03:18

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00026	.02940	.04786	.65070	.00256	.00036	20.820
SDev	.00244	.01659	.03951	.00000	.00033	.00008	.055
%RSD	933.28	56.411	82.563	.00036	12.918	21.873	.26445
#1	.00296	.05216	.07949	.65070	.00302	.00029	20.868
#2	-.00275	.03074	-.00910	.65070	.00251	.00042	20.823
#3	.00008	.02013	.05282	.65070	.00222	.00043	20.845
#4	-.00132	.01458	.06822	.65070	.00251	.00029	20.742
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00122	.00035	.00476	.01389	.02796	431.23	.02701
SDev	.00181	.00180	.00223	.00044	.00148	1.88	.00026
%RSD	148.55	519.08	46.847	3.1643	5.2851	.43589	.94718
#1	.00165	.00244	.00782	.01323	.02946	428.46	.02737
#2	.00172	-.00035	.00463	.01411	.02612	432.53	.02699
#3	.00286	.00104	.00250	.01411	.02879	432.22	.02679
#4	-.00136	-.00174	.00410	.01411	.02746	431.72	.02688
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	17.999	2.5455	.14654	H604.75	.02126	.00003	.03106
SDev	.051	.0056	.00636	4.20	.00674	.04218	.01199
%RSD	.28186	.21938	4.3394	.69477	31.678	141960.	38.601
#1	17.950	2.5418	.15393	H598.52	.01721	.01337	.04138
#2	18.035	2.5487	.14407	H606.56	.02420	.02848	.04152
#3	18.049	2.5517	.13915	H607.67	.02926	-.06255	.02077
#4	17.960	2.5399	.14900	H606.25	.01439	.02083	.02058
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00972	12.562	.01300	.25071	-.00115	-.01599	.11863
SDev	.04175	.064	.01907	.00080	.00046	.02518	.00254
%RSD	429.54	.51092	146.75	.32032	40.406	157.47	2.1386
#1	.03828	12.529	.03050	.24960	-.00049	.00730	.12000
#2	-.00875	12.610	.02845	.25101	-.00147	-.01596	.11981

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#3	-.06359	12.622	-.00246	.25149	-.00115	-.05098	.11483
#4	-.00482	12.489	-.00452	.25075	-.00147	-.00433	.11990

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.16615
SDev	.00139
%RSD	.83513

#1	.16634
#2	.16415
#3	.16728
#4	.16681

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMJEP5F Operator: MTW
 Run Time: 08/22/00 14:06:32
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00217	.02756	.01283	.11843	.00063	.00025	4.3423
SDev	.00184	.01253	.02288	.00162	.00025	.00007	.0425
%RSD	84.703	45.478	178.35	1.3672	40.000	27.264	.97918
#1.	.00145	.03831	-.01136	.11863	.00050	.00029	4.3913
#2.	.00004	.00959	.04284	.11723	.00050	.00015	4.2894
#3.	.00431	.03298	.00412	.11722	.00101	.00029	4.3337
#4.	.00288	.02937	.01571	.12065	.00050	.00028	4.3546
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00014	.00035	.00611	.00353	.00549	86.775	.00397
SDev	.00111	.00403	.00448	.00125	.00211	.556	.00042
%RSD	769.33	1151.6	73.302	35.446	38.380	.64061	10.689
#1.	-.00176	-.00034	.01103	.00353	.00482	86.320	.00338
#2.	.00073	-.00454	.00092	.00176	.00283	87.312	.00393
#3.	.00030	.00523	.00412	.00441	.00682	86.270	.00423
#4.	.00015	.00105	.00837	.00441	.00749	87.196	.00432
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.7596	.52971	.03202	122.09	.00655	-.01704	.02341
SDev	.0178	.00345	.00246	1.25	.00424	.04928	.01792
%RSD	.47379	.65209	7.6925	1.0253	64.789	289.15	76.543
#1.	3.7656	.53316	.03079	120.73	.00425	-.05503	-.00020
#2.	3.7736	.52627	.03078	123.51	.00213	-.06270	.02077
#3.	3.7335	.52726	.03571	121.41	.00810	.03621	.03130
#4.	3.7656	.53217	.03079	122.70	.01173	.01335	.04177
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01471	2.5108	.00679	.05198	-.00049	.01150	.02623
SDev	.02695	.0269	.01811	.00015	.00060	.07652	.00170
%RSD	183.26	1.0709	266.70	.29797	121.72	665.63	6.4647
#1.	-.00488	2.5093	.02620	.05182	-.00082	.10204	.02499
#2.	.05388	2.4746	.01808	.05198	-.00115	.00861	.02863

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#3	-.00096	2.5209	-.00653	.05193	-.00016	.02020	.02508
#4	.01079	2.5383	-.01059	.05219	.00016	-.08485	.02621
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.03558
SDev	.00153
%RSD	4.3007

#1	.03454
#2	.03403
#3	.03661
#4	.03715

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DHMJESF Operator: MTW
 Run Time: 08/22/00 14:09:40
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04620	1.9658	2.0664	1.5532	1.9039	.05042	71.033
SDev	.00143	.0111	.0378	.0204	.0096	.00030	.615
%RSD	3.1004	.56471	1.8298	1.3131	.50609	.59872	.86528
#1	.04689	1.9569	2.1197	1.5441	1.8906	.05005	70.583
#2	.04693	1.9819	2.0537	1.5837	1.9084	.05066	71.024
#3	.04693	1.9640	2.0616	1.5421	1.9036	.05066	71.905
#4	.04405	1.9605	2.0308	1.5427	1.9129	.05029	70.621
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04212	.48807	.19742	.25686	1.0238	473.63	.97416
SDev	.00229	.00562	.00309	.00182	.0056	2.74	.00738
%RSD	5.4347	1.1515	1.5626	.70939	.54379	.57746	.75744
#1	.04442	.48006	.19502	.25443	1.0200	470.19	.96737
#2	.03896	.49122	.19609	.25885	1.0227	476.05	.97758
#3	.04238	.49260	.20193	.25709	1.0320	472.68	.96877
#4	.04272	.48842	.19662	.25708	1.0207	475.59	.98290
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	66.312	2.9637	1.1158	H646.46	.52358	.50592	.51703
SDev	.234	.0184	.0047	4.65	.01029	.04748	.03613
%RSD	.35352	.62185	.42270	.71893	1.9645	9.3857	6.9883
#1	65.976	2.9428	1.1096	H641.66	.53777	.44313	.52754
#2	66.514	2.9713	1.1195	H649.58	.51763	.54964	.52756
#3	66.409	2.9851	1.1195	H643.39	.51463	.53454	.54818
#4	66.350	2.9555	1.1145	H651.21	.52431	.49638	.46483
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9958	H22.154	1.9674	1.2256	.94732	1.8606	.59391
SDev	.0878	.118	.0409	.0059	.00505	.0991	.00424
%RSD	4.3987	.53126	2.0772	.47984	.53354	5.3246	.71445
#1	1.9175	H22.027	1.9998	1.2170	.94077	1.7205	.58860
#2	1.9488	H22.230	1.9115	1.2288	.94961	1.8606	.59733

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#3	2.1173	H22.276	1.9958	1.2267	.95256	1.9306	.59734
#4	1.9998	H22.085	1.9625	1.2298	.94634	1.9306	.59236

Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.62982
SDev	.00700
%RSD	1.1115

#1	.61936
#2	.63261
#3	.63317
#4	.63413

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMJEDF Operator: MTW
 Run Time: 08/22/00 14:12:54
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04662	2.0009	2.1064	1.5963	1.9441	.05159	72.900
SDev	.00244	.0156	.0515	.0010	.0166	.00039	.293
%RSD	5.2426	.77725	2.4453	.06341	.85365	.75395	.40206
#1	.04410	1.9907	2.1114	1.5974	1.9338	.05129	72.479
#2	.04983	2.0014	2.0611	1.5954	1.9300	.05153	73.141
#3	.04699	1.9888	2.1769	1.5968	1.9456	.05140	72.936
#4	.04557	2.0227	2.0763	1.5954	1.9669	.05216	73.045
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04101	.49570	.20153	.26260	1.0434	486.57	.99392
SDev	.00626	.00349	.00176	.00232	.0063	4.68	.01450
%RSD	15.263	.70455	.87221	.88351	.60692	.96148	1.4586
#1	.04844	.49116	.20353	.26061	1.0347	483.35	.98590
#2	.04060	.49955	.20193	.26150	1.0474	483.34	.98037
#3	.03317	.49537	.19927	.26238	1.0427	486.31	.99604
#4	.04185	.49672	.20140	.26591	1.0487	493.26	1.0134
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	67.912	3.0419	1.1343	H664.51	.52462	.49096	.53502
SDev	.477	.0142	.0080	7.65	.01614	.04090	.03129
%RSD	.70272	.46529	.70920	1.1514	3.0763	8.3317	5.8487
#1	67.518	3.0234	1.1244	H660.08	.51351	.44337	.49567
#2	67.649	3.0441	1.1343	H658.41	.52592	.54226	.52725
#3	67.890	3.0421	1.1343	H664.15	.51209	.48149	.54815
#4	68.589	3.0579	1.1441	H675.40	.54696	.49671	.56902
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0360	H22.700	2.0583	1.2532	.96681	1.9482	.60829
SDev	.0479	.175	.0547	.0108	.00616	.0742	.00452
%RSD	2.3534	.77300	2.6575	.86440	.63728	3.8066	.74299
#1	2.0586	H22.542	2.1003	1.2450	.96042	1.9191	.60231
#2	2.0664	H22.606	2.0429	1.2450	.96501	1.9073	.60738

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#3	1.9645	H22.710	1.9875	1.2550	.96665	1.9074	.61103
#4	2.0547	H22.942	2.1026	1.2678	.97517	2.0592	.61244
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.64105
SDev	.00527
%RSD	.82223

#1	.63659
#2	.63789
#3	.64135
#4	.64835

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMJTF Operator: MTW
 Run Time: 08/22/00 14:16:08
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00036	.02880	.04187	.52505	.00073	.00024	20.873
SDev	.00082	.00596	.03912	.00328	.00004	.00007	.118
%RSD	228.13	20.689	93.430	.62451	6.0605	30.767	.56292
#1	-.00035	.02477	.05058	.52420	.00080	.00030	20.940
#2	-.00035	.02291	-.01502	.52762	.00071	.00018	20.724
#3	.00107	.03198	.05825	.52077	.00071	.00018	20.840
#4	.00107	.03554	.07365	.52762	.00071	.00030	20.990
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00174	.00453	.00509	.02778	.03927	589.47	.03141
SDev	.00323	.00180	.00214	.00114	.00191	3.14	.00010
%RSD	186.18	39.777	42.092	4.0928	4.8708	.53239	.33099
#1	.00549	.00243	.00735	.02910	.03877	586.47	.03156
#2	-.00169	.00384	.00257	.02734	.04077	590.42	.03139
#3	.00322	.00662	.00416	.02646	.03678	593.46	.03131
#4	-.00008	.00524	.00629	.02822	.04077	587.55	.03139
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	15.192	2.2499	.16624	H579.34	.02172	.02290	.02537
SDev	.057	.0070	.00493	3.93	.01096	.01898	.00608
%RSD	.37345	.30984	2.9629	.67784	50.441	82.902	23.963
#1	15.114	2.2546	.16378	H575.94	.00631	.02853	.01993
#2	15.194	2.2399	.17363	H581.55	.02275	.02099	.03059
#3	15.248	2.2507	.16378	H583.75	.02590	.04382	.03069
#4	15.213	2.2546	.16378	H576.13	.03193	-.00175	.02029
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00283	7.9934	.00732	.24017	-.00115	.01503	.01785
SDev	.02251	.0134	.02169	.00089	.00053	.09929	.00009
%RSD	793.91	.16732	296.32	.37153	46.657	660.78	.51469
#1	-.02047	7.9818	.03863	.23926	-.00180	.15812	.01781
#2	.02655	7.9818	.00375	.24030	-.00115	-.05219	.01799

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#3	.00304	8.0049	-.00241	.24135	-.00115	.00628	.01780
#4	-.02046	8.0049	-.01068	.23978	-.00049	-.05211	.01780
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.02583
SDev	.00173
%RSD	6.6928

#1	.02802
#2	.02457
#3	.02433
#4	.02639

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMK5F

Operator: MTW

Run Time: 08/22/00 14:19:21

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00010	.06707	.04056	.44864	.00535	.00027	58.587
SDev	.00002	.00923	.02101	.00386	.00013	.00007	.258
%RSD	21.244	13.761	51.813	.86035	2.3440	27.109	.44037
#1	-.00010	.07383	.06173	.44391	.00553	.00033	58.357
#2	-.00007	.07369	.04235	.44854	.00523	.00019	58.763
#3	-.00010	.06657	.01162	.45336	.00532	.00033	58.853
#4	-.00012	.05419	.04654	.44873	.00532	.00022	58.375
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00057	.00035	.00680	.00332	.22884	598.82	.03984
SDev	.00171	.00180	.00137	.00044	.00086	2.52	.00051
%RSD	299.52	519.68	20.154	13.221	.37575	.42118	1.2827
#1	-.00217	.00105	.00627	.00355	.22984	601.11	.04048
#2	-.00014	-.00175	.00840	.00354	.22918	595.65	.03924
#3	-.00162	-.00035	.00734	.00354	.22784	597.95	.03990
#4	.00165	.00244	.00521	.00267	.22851	600.57	.03974
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	40.921	.91441	.09485	387.55	.01545	.03786	.00214
SDev	.072	.00234	.00402	2.08	.00963	.02861	.02140
%RSD	.17481	.25616	4.2399	.53591	62.360	75.567	1000.9
#1	40.842	.91392	.08992	388.94	.01082	.02838	-.00050
#2	40.880	.91293	.09485	385.16	.01959	.07383	-.00046
#3	40.973	.91785	.09978	386.51	.00474	.00563	.03070
#4	40.989	.91293	.09485	389.60	.02663	.04358	-.02119
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01236	11.021	.01443	.30032	.00074	.01733	.00672
SDev	.01612	.035	.02098	.00097	.00041	.05423	.00398
%RSD	130.42	.31314	145.40	.32158	55.925	312.87	59.277
#1	.02313	11.039	.02418	.30071	.00082	-.00312	.00663
#2	.02705	10.970	.02418	.29941	.00115	.09029	.01160

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#3	.00746	11.045	.02638	.29967	.00082	.02029	.00682
#4	-.00821	11.028	-.01701	.30150	.00016	-.03812	.00184
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.18570
SDev	.00243
%RSD	1.3061

#1	.18269
#2	.18795
#3	.18480
#4	.18735

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMK9F Operator: MTW
 Run Time: 08/22/00 14:22:30
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00048	.03938	.05140	.43365	.00389	.00018	55.213
SDev	.00139	.00906	.02943	.00167	.00025	.00006	.191
%RSD	291.47	23.018	57.251	.38494	6.4516	32.355	.34612
#1	-.00013	.05062	.01566	.43230	.00402	.00022	55.366
#2	-.00156	.03627	.04279	.43572	.00352	.00010	55.005
#3	-.00155	.02910	.06212	.43229	.00402	.00022	55.098
#4	.00134	.04153	.08503	.43430	.00402	.00019	55.384
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00238	.00000	.00561	.00333	.25580	568.64	.03705
SDev	.00248	.00070	.00320	.00151	.00122	1.70	.00047
%RSD	103.98	26031.	57.047	45.277	.47603	.29814	1.2652
#1	-.00257	-.00035	.00574	.00355	.25714	566.70	.03704
#2	.00116	-.00036	.00415	.00178	.25647	568.11	.03654
#3	-.00439	-.00034	.00255	.00267	.25514	570.75	.03693
#4	-.00372	.00105	.00999	.00531	.25447	568.99	.03767
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	38.177	1.0081	.09362	374.15	.01612	-.00576	.01004
SDev	.064	.0017	.00246	1.93	.01242	.03366	.02256
%RSD	.16691	.16661	2.6304	.51542	77.071	584.59	224.66
#1	38.121	1.0084	.08993	371.82	.00987	-.01716	.00999
#2	38.143	1.0064	.09485	374.50	.01420	-.01711	.04137
#3	38.266	1.0074	.09485	376.49	.00630	-.03235	-.01092
#4	38.178	1.0103	.09485	373.80	.03411	.04358	-.00027
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02185	10.385	-.01121	.27322	.00098	.00301	.00456
SDev	.04321	.036	.00714	.00082	.00078	.05759	.00473
%RSD	197.74	.34390	63.665	.30021	79.349	1916.2	103.72
#1	-.04731	10.414	-.00864	.27217	.00213	.06724	.00175
#2	-.03948	10.333	-.01877	.27302	.00082	-.02618	.00184

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#3	.04279	10.396	-.01490	.27406	.00049	-.06120	.00306
#4	-.04340	10.397	-.00252	.27363	.00049	.03217	.01160

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.01271
SDev	.00161
%RSD	12.633

#1	.01332
#2	.01385
#3	.01334
#4	.01033

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMKEF Operator: MTW
Run Time: 08/22/00 14:25:39
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00004	.65240	.00368	.66518	.01146	.00018	57.198
SDev	.00137	.00444	.03513	.00204	.00024	.00006	.147
%RSD	3187.3	.68108	955.90	.30736	2.1410	35.884	.25707
#1	-.00111	.65415	-.00598	.66407	.01126	.00008	57.175
#2	.00031	.64878	-.01752	.66689	.01156	.00021	57.199
#3	-.00111	.64878	-.01753	.66691	.01126	.00021	57.387
#4	.00174	.65787	.05574	.66286	.01177	.00021	57.029
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00102	.00207	.00891	.00430	1.3381	246.21	.03496
SDev	.00172	.00209	.00184	.00085	.0051	1.30	.00055
%RSD	167.87	101.08	20.673	19.661	.38194	.52869	1.5790
#1	-.00267	.00103	.00625	.00363	1.3343	246.62	.03533
#2	-.00216	.00102	.00944	.00363	1.3370	245.41	.03459
#3	-.00034	.00102	.00944	.00540	1.3456	247.85	.03440
#4	.00107	.00520	.01050	.00452	1.3356	244.95	.03552
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.977	.15333	.00882	H523.96	.00878	-.00065	-.00001
SDev	.185	.00127	.00493	3.02	.00710	.03301	.02838
%RSD	.45169	.82971	55.849	.57732	80.791	5052.9	555910.
#1	41.072	.15383	.01128	H526.09	.01718	-.03296	-.02084
#2	40.917	.15284	.01128	H521.88	.00321	-.01776	-.01059
#3	41.171	.15481	.01128	H526.99	.00260	.04293	-.01053
#4	40.748	.15186	.00143	H520.89	.01214	.00518	.04194
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.02390	17.469	-.01572	.40353	.01384	.01911	.00506
SDev	.00870	.086	.02920	.00219	.00031	.04201	.00009
%RSD	36.391	.49049	185.79	.54308	2.2661	219.89	1.8387
#1	-.02097	17.502	-.00657	.40475	.01360	.05127	.00511
#2	-.02880	17.456	.01402	.40177	.01392	.03956	.00511

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#3	-.01311	17.560	-.01474	.40601	.01425	-.04226	.00511
#4	-.03272	17.357	-.05559	.40161	.01360	.02786	.00492

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.05967
SDev	.00134
%RSD	2.2441

#1	.05852
#2	.05857
#3	.06120
#4	.06039

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DHMJE/2 NA

Operator: MTW

Run Time: 08/22/00 14:36:17

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00163	.39363	.00293	.32337	.01699	.00037	12.057
SDev	.00073	.00762	.01185	.00100	.00040	.00006	.050
%RSD	44.813	1.9344	404.22	.31056	2.3488	16.557	.41239
#1	.00126	.39503	-.00380	.32287	.01679	.00041	12.040
#2	.00126	.39857	.00389	.32288	.01679	.00041	12.087
#3	.00272	.39846	.01922	.32488	.01679	.00039	12.106
#4	.00126	.38248	-.00757	.32287	.01759	.00028	11.995
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00136	-.00036	.00490	.02669	.25415	219.31	.01279
SDev	.00309	.00197	.00153	.00132	.00139	.64	.00077
%RSD	226.11	549.22	31.321	4.9605	.54542	.29327	6.0187
#1	-.00184	-.00036	.00517	.02559	.25248	218.59	.01275
#2	L-.00545	-.00314	.00304	.02558	.25381	219.49	.01247
#3	.00011	.00103	.00676	.02823	.25448	219.06	.01388
#4	.00171	.00103	.00464	.02735	.25581	220.10	.01208
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.5382	3.0054	.08377	319.72	.00814	.01298	.00769
SDev	.0259	.0056	.00472	1.32	.00416	.02231	.02318
%RSD	.27158	.18777	5.6295	.41157	51.168	171.85	301.25
#1	9.5175	3.0062	.08008	319.01	.01179	.03577	.03120
#2	9.5175	3.0081	.08008	320.08	.01130	.02048	-.00008
#3	9.5710	3.0101	.08993	318.39	.00636	.01298	-.02109
#4	9.5469	2.9973	.08500	321.39	.00309	-.01731	.02076
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00227	8.1172	-.01328	.14578	.00246	.03420	.07628
SDev	.04102	.0099	.01944	.00052	.00065	.05172	.00313
%RSD	1808.3	.12180	146.42	.35842	26.667	151.23	4.1021
#1	.03495	8.1042	.00789	.14552	.00213	.08970	.07469
#2	.03103	8.1215	-.01896	.14552	.00213	.06637	.07469

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#3	-.04340	8.1158	-.00469	.14552	.00344	-.00377	.08098
#4	-.03165	8.1273	-.03736	.14656	.00213	-.01549	.07478

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00952
SDev	.00066
%RSD	6.9167

#1	.00959
#2	.00928
#3	.01039
#4	.00883

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMJEP10 NA Operator: MTW
 Run Time: 08/22/00 14:39:26
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00003	.08953	-.00686	.06347	.00344	.00021	2.4685
SDev	.00002	.00792	.03041	.00430	.00015	.00006	.0099
%RSD	57.848	8.8483	443.05	6.7749	4.2918	27.807	.40158
#1	-.00004	.08151	-.02701	.05920	.00322	.00019	2.4540
#2	-.00001	.08504	-.01943	.06261	.00352	.00030	2.4756
#3	-.00004	.09936	.03844	.06262	.00352	.00018	2.4705
#4	-.00002	.09221	-.01946	.06945	.00352	.00017	2.4739
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00003	-.00140	.00079	.00551	.05509	44.030	.00108
SDev	.00277	.00287	.00080	.00085	.00115	.299	.00073
%RSD	10424.	205.57	100.50	15.333	2.0949	.67852	67.903
#1	-.00199	-.00453	.00039	.00441	.05409	43.650	.00057
#2	-.00075	.00105	.00146	.00530	.05609	44.377	.00074
#3	-.00142	-.00314	-.00014	.00617	.05409	44.079	.00217
#4	.00405	.00103	.00146	.00618	.05609	44.013	.00085
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9414	.61604	.01478	64.985	.00462	-.02667	-.00784
SDev	.0059	.00148	.00246	.210	.00497	.02933	.01782
%RSD	.30584	.23959	16.658	.32292	107.55	109.97	227.38
#1	1.9367	.61481	.01109	65.065	.00397	-.02486	-.01046
#2	1.9501	.61776	.01602	65.242	.00596	-.05504	.00005
#3	1.9394	.61677	.01602	64.850	.01026	-.04003	-.03132
#4	1.9394	.61481	.01602	64.782	-.00171	.01325	.01038
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00965	1.6087	.00460	.02979	-.00025	.01739	.01674
SDev	.01408	.0474	.01063	.00013	.00041	.04710	.00294
%RSD	145.90	2.9450	231.30	.43848	167.77	270.83	17.539
#1	-.01651	1.6115	.00767	.02972	-.00016	.06707	.01362
#2	-.02042	1.5479	-.01077	.02999	-.00016	.04362	.01981

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#3	.01092	1.6637	.01374	.02972	-.00082	-.00300	.01494
#4	-.01258	1.6116	.00776	.02972	.00016	-.03813	.01860

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00444
SDev	.00063
%RSD	14.139

#1	.00419
#2	.00498
#3	.00494
#4	.00368

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-12 Operator: MTW
 Run Time: 08/22/00 14:42:34
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0132	50.885	5.2679	5.1213	5.1151	5.3247	53.216
SDev	.0023	.202	.0452	.0197	.0203	.0256	.188
%RSD	.22521	.39686	.85740	.38383	.39726	.48054	.35318
#1	1.0113	50.701	5.3191	5.0952	5.0883	5.3088	53.187
#2	1.0144	51.094	5.2918	5.1284	5.1360	5.3530	53.326
#3	1.0113	50.724	5.2225	5.1194	5.1122	5.2982	52.963
#4	1.0159	51.023	5.2384	5.1420	5.1237	5.3390	53.386
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.3420	5.2042	5.1493	5.0949	52.965	50.441	4.8903
SDev	.0200	.0225	.0210	.0196	.194	.177	.0198
%RSD	.37470	.43149	.40760	.38371	.36697	.35023	.40520
#1	5.3323	5.1833	5.1384	5.0695	52.830	50.352	4.8617
#2	5.3484	5.2125	5.1714	5.1145	53.149	50.608	4.9027
#3	5.3206	5.1889	5.1256	5.0907	52.768	50.237	4.9045
#4	5.3667	5.2320	5.1618	5.1049	53.115	50.567	4.8922
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	51.903	5.1219	5.1341	51.938	5.4457	5.1417	5.2456
SDev	.210	.0193	.0316	.228	.0247	.0297	.0277
%RSD	.40452	.37602	.61484	.43847	.45306	.57860	.52739
#1	51.735	5.1122	5.1021	51.646	5.4239	5.1375	5.2404
#2	52.030	5.1369	5.1613	52.138	5.4759	5.1152	5.2090
#3	51.714	5.0994	5.1119	51.872	5.4272	5.1301	5.2718
#4	52.132	5.1389	5.1612	52.098	5.4557	5.1841	5.2612
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0974	5.1577	5.2742	5.2601	5.0604	10.314	5.1595
SDev	.0906	.0444	.0265	.0174	.0171	.047	.0207
%RSD	1.7772	.86019	.50206	.33023	.33866	.45734	.40173
#1	5.1882	5.1285	5.2547	5.2390	5.0465	10.318	5.1427
#2	5.0989	5.1927	5.2915	5.2773	5.0754	10.361	5.1781

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#3	5.1292	5.1111	5.2487	5.2531	5.0446	10.249	5.1405
#4	4.9734	5.1984	5.3020	5.2709	5.0750	10.326	5.1768

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem	ZN
Units	ppm
Avge	4.9887
SDev	.0199
%RSD	.39818

#1	4.9744
#2	5.0094
#3	4.9692
#4	5.0018

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB12

Operator: MTW

Run Time: 08/22/00 14:45:43

Cmment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mdde: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00071	.01611	-.00880	.00302	.00025	.00071	.00714
SDev	.00185	.00173	.01681	.00507	.00021	.00007	.00323
%RSD	260.07	10.732	190.96	167.81	82.911	9.3094	45.178

#1	-.00143	.01568	.00470	.00980	.00030	.00073	.00809
#2	.00286	.01384	-.03002	-.00247	.00050	.00061	.00772
#3	-.00002	.01745	-.01455	.00237	.00000	.00074	.00258
#4	.00143	.01747	.00468	.00237	.00021	.00073	.01018

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00030	.00140	.00253	.00110	.00216	.96490	-.00075
SDev	.00198	.00209	.00097	.00132	.00180	.27164	.00056
%RSD	667.95	149.79	38.398	120.02	83.441	28.152	74.908

#1	-.00063	.00245	.00359	.00177	.00150	.89671	-.00141
#2	.00067	.00244	.00306	.00177	.00083	1.3595	-.00094
#3	-.00173	-.00174	.00146	-.00088	.00150	.73968	-.00056
#4	.00288	.00243	.00199	.00177	.00483	.86365	-.00009

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01004	.00098	.00246	.01654	.00647	.00951	-.00259
SDev	.01037	.00000	.00246	.00391	.00713	.01449	.01314
%RSD	103.28	.07473	99.981	23.613	110.23	152.36	506.86

#1	.01138	.00098	.00123	.01363	.00603	-.00942	.00009
#2	.01941	.00099	.00616	.01631	.01466	.02093	.00005
#3	-.00469	.00098	.00123	.01408	.00787	.02078	-.02089
#4	.01406	.00099	.00123	.02213	-.00267	.00576	.01039

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01274	.01012	.00307	.00044	-.00025	.05837	-.00086
SDev	.01767	.00336	.01943	.00026	.00056	.05087	.00185
%RSD	138.69	33.162	632.60	59.943	227.71	87.160	214.27

#1	.03428	.00724	-.02517	.00066	-.00049	.02916	.00003
#2	-.00881	.01303	.01593	.00014	-.00082	.04085	.00012

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#3	.01470	.00719	.01583	.00030	-.00016	.02922	-.00363
#4	.01079	.01303	.00570	.00066	.00049	.13423	.00003

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00109
SDev	.00044
%RSD	40.564

#1	.00173
#2	.00093
#3	.00072
#4	.00099

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHMJES/2 NA Operator: MTW
 Run Time: 08/22/00 14:48:52
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02439	1.4402	1.0663	.82774	1.0016	.02655	38.518
SDev	.00137	.0043	.0228	.00342	.0059	.00007	.358
%RSD	5.6007	.29906	2.1378	.41304	.58668	.24691	.92981
#1	.02261	1.4357	1.0596	.82261	.99829	.02645	38.254
#2	.02402	1.4375	1.0635	.82946	1.0091	.02659	38.169
#3	.02546	1.4428	1.0981	.82945	1.0033	.02658	38.777
#4	.02546	1.4448	1.0441	.82944	.99586	.02658	38.873
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02331	.25549	.10501	.15128	.78311	248.02	.48763
SDev	.00262	.00501	.00205	.00221	.00333	1.48	.00651
%RSD	11.219	1.9622	1.9552	1.4590	.42568	.59770	1.3342
#1	.02391	.25095	.10355	.14841	.77877	246.71	.48529
#2	.01946	.25235	.10302	.15105	.78411	249.79	.49636
#3	.02481	.25653	.10621	.15370	.78677	248.69	.48794
#4	.02506	.26211	.10727	.15194	.78278	246.89	.48091
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	35.055	3.2632	.58625	351.14	.27843	.26813	.27411
SDev	.122	.0175	.00472	2.84	.01164	.04320	.01343
%RSD	.34695	.53646	.80447	.80943	4.1809	16.112	4.8998
#1	34.876	3.2445	.58256	349.81	.27176	.25471	.25843
#2	35.146	3.2524	.58748	355.00	.26827	.23201	.27913
#3	35.087	3.2809	.59241	351.33	.27917	.25490	.28977
#4	35.109	3.2750	.58256	348.40	.29450	.33090	.26911
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0256	13.568	1.0402	.65780	.49594	1.0160	.32753
SDev	.0324	.072	.0281	.00310	.00152	.0853	.00182
%RSD	3.1579	.52732	2.7021	.47145	.30690	8.3967	.55487
#1	1.0471	13.464	1.0284	.65499	.49389	.96930	.32837
#2	1.0040	13.597	1.0819	.66152	.49586	.92259	.32481

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#3	1.0589	13.626	1.0306	.65917	.49749	1.1095	.32856
#4	.99227	13.586	1.0202	.65551	.49651	1.0628	.32838
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.25530
SDev	.00175
%RSD	.68424

#1	.25554
#2	.25343
#3	.25758
#4	.25467

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHJED/2 NA

Operator: MTW

Run Time: 08/22/00 14:52:00

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02547	1.4509	1.1038	.82827	1.0075	.02677	38.799
SDev	.00002	.0055	.0337	.00230	.0040	.00007	.299
%RSD	.07095	.37829	3.0548	.27727	.40001	.25068	.77122

#1	.02547	1.4500	1.1019	.82948	1.0023	.02671	38.653
#2	.02545	1.4483	1.1406	.82605	1.0078	.02672	38.828
#3	.02549	1.4588	1.1133	.83088	1.0076	.02682	39.204
#4	.02547	1.4464	1.0595	.82665	1.0122	.02683	38.512

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02169	.25618	.10528	.15172	.79576	246.72	.48842
SDev	.00196	.00385	.00140	.00151	.00346	.96	.00491
%RSD	9.0346	1.5016	1.3287	.99466	.43513	.38899	1.0058

#1	.02345	.25234	.10408	.15105	.79542	245.53	.48540
#2	.02264	.25374	.10621	.15017	.79343	246.79	.48708
#3	.01894	.26072	.10674	.15371	.80076	246.67	.48551
#4	.02174	.25793	.10408	.15194	.79343	247.88	.49570

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	35.057	3.2647	.58872	349.30	.28271	.25866	.27671
SDev	.103	.0156	.01092	2.23	.01295	.02814	.01302
%RSD	.29389	.47743	1.8552	.63783	4.5797	10.877	4.7045

#1	34.905	3.2524	.58256	347.47	.27273	.23959	.27927
#2	35.079	3.2691	.57763	349.50	.29422	.24719	.25860
#3	35.130	3.2848	.60226	347.86	.29355	.30051	.27934
#4	35.112	3.2524	.59241	352.37	.27033	.24735	.28962

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0246	13.568	1.0587	.66025	.49708	1.0013	.32880
SDev	.0595	.053	.0118	.00236	.00147	.0598	.00370
%RSD	5.8098	.39292	1.1184	.35746	.29659	5.9760	1.1249

#1	1.0863	13.510	1.0531	.65708	.49586	1.0626	.32837
#2	.98838	13.574	1.0448	.66100	.49782	1.0277	.32462

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#3	.96097	13.638	1.0675	.66021	.49880	.92247	.33363
#4	1.0628	13.551	1.0696	.66272	.49586	.99249	.32856

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.25932
SDev	.00199
%RSD	.76689

#1	.25738
#2	.26070
#3	.25786
#4	.26133

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DHMJT/2 NA Operator: MTW
 Run Time: 08/22/00 14:55:09
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00010	2.1959	.00867	.27594	.02932	.00031	31.260
SDev	.00138	.0192	.03040	.00200	.00013	.00010	.241
%RSD	1421.2	.87658	350.45	.72599	.42769	31.510	.76945

#1	-.00046	2.1704	.00799	.27418	.02935	.00032	31.045
#2	.00098	2.2169	-.03113	.27770	.02915	.00044	31.494
#3	-.00189	2.1955	.04249	.27423	.02944	.00019	31.061
#4	.00098	2.2007	.01534	.27766	.02935	.00031	31.441

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00033	.00130	.00906	.04031	5.1984	306.11	.01836
SDev	.00229	.00239	.00080	.00044	.0224	1.84	.00022
%RSD	689.36	184.06	8.8011	1.1006	.43169	.60034	1.2246

#1	.00093	-.00185	.00946	.04009	5.1690	304.99	.01809
#2	-.00355	.00375	.00946	.04098	5.2236	306.37	.01836
#3	-.00035	.00234	.00946	.04009	5.1996	308.59	.01864
#4	.00163	.00094	.00786	.04009	5.2016	304.48	.01836

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.945	8.7676	.08821	273.61	.01555	-.00441	.01520
SDev	.084	.0400	.00636	2.18	.00848	.01240	.03007
%RSD	.64779	.45566	7.2118	.79720	54.544	281.20	197.84

#1	12.838	8.7197	.08081	273.06	.01898	-.00448	.00999
#2	12.996	8.8102	.09067	273.23	.01835	-.01959	-.02129
#3	13.025	8.7521	.08574	276.66	.02186	.01080	.02048
#4	12.921	8.7885	.09559	271.48	.00304	-.00438	.05162

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00194	7.9065	-.00272	.24638	.05160	-.01607	.01391
SDev	.02900	.0116	.01455	.00119	.00027	.05434	.00292
%RSD	1492.7	.14675	534.19	.48399	.51841	338.19	21.023

#1	.04006	7.8891	.01266	.24553	.05127	-.05686	.01133
#2	.00887	7.9123	-.02241	.24657	.05193	-.06867	.01640

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#3	-.01862	7.9122	.00038	.24799	.05160	.03639	.01143
#4	-.02253	7.9123	-.00153	.24542	.05160	.02487	.01649

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.06135
SDev	.00137
%RSD	2.2369

#1	.06164
#2	.05933
#3	.06217
#4	.06226

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMKE/2 CA,NA Operator: MTW
 Run Time: 08/22/00 14:58:18
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00077	24.114	.06331	.38278	.29623	.00165	317.65
SDev	.00186	.075	.01533	.00198	.00144	.00006	.97
%RSD	240.14	.31138	24.216	.51855	.48726	3.6222	.30558

#1	.00140	24.113	.05833	.38447	.29611	.00168	318.93
#2	-.00148	24.219	.05374	.38240	.29812	.00169	316.68
#3	-.00009	24.079	.05503	.38013	.29460	.00156	317.81
#4	-.00292	24.045	.08612	.38411	.29611	.00168	317.17

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00003	.02391	.05367	.10713	46.710	97.128	.05084
SDev	.00346	.00113	.00176	.00045	.095	.603	.00076
%RSD	10410.	4.7457	3.2722	.41717	.20422	.62049	1.5021

#1	.00361	.02530	.05354	.10780	46.808	97.081	.05070
#2	-.00467	.02392	.05141	.10691	46.776	97.957	.05164
#3	.00012	.02252	.05567	.10690	46.638	96.519	.05117
#4	.00107	.02391	.05407	.10690	46.620	96.957	.04985

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	78.026	.83236	.02053	301.15	.06257	.08115	.03877
SDev	.248	.00214	.00286	1.83	.00772	.01900	.02318
%RSD	.31845	.25753	13.920	.60892	12.340	23.408	59.792

#1	78.090	.83534	.02301	300.23	.06304	.08689	.06233
#2	78.339	.83140	.02300	303.83	.05639	.05643	.05174
#3	77.913	.83234	.01806	299.78	.07330	.10201	.03102
#4	77.760	.83037	.01805	300.76	.05754	.07928	.00998

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.09535	H35.124	.02288	2.6339	.43656	.07630	.07607
SDev	.04381	.125	.01769	.0097	.00209	.07896	.00282
%RSD	45.949	.35548	77.307	.36636	.47858	103.48	3.7013

#1	-.05395	H35.154	-.00113	2.6343	.43656	.11031	.07856
#2	-.06188	H35.288	.03168	2.6473	.43950	.15738	.07368

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#3	-.14059	H35.015	.02130	2.6255	.43525	.06540	.07359
#4	-.12497	H35.039	.03969	2.6285	.43492	-.02789	.07846

Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.70139
SDev	.00216
%RSD	.30771

#1	.69881
#2	.70409
#3	.70118
#4	.70149

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMJEF/2 NA Operator: MTW
 Run Time: 08/22/00 15:01:32
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00030	.02495	.00737	.31949	.00131	.00025	10.747
SDev	.00215	.01619	.04980	.00701	.00024	.00007	.074
%RSD	728.40	64.870	675.29	2.1938	18.761	27.889	.69058
#1	.00150	.04284	.08053	.31074	.00151	.00031	10.844
#2	.00150	.03207	-.00815	.32583	.00151	.00031	10.763
#3	-.00279	.00527	-.01177	.31698	.00121	.00018	10.704
#4	-.00138	.01963	-.03111	.32442	.00101	.00019	10.676
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00145	.00104	.00477	.00728	.01431	217.60	.01222
SDev	.00254	.00197	.00201	.00151	.00257	1.68	.00106
%RSD	175.48	189.00	42.079	20.717	17.991	.77252	8.6948
#1	.00203	.00383	.00623	.00882	.01614	215.55	.01264
#2	-.00179	.00105	.00623	.00794	.01681	216.94	.01247
#3	.00435	-.00036	.00198	.00529	.01281	219.23	.01068
#4	.00119	-.00035	.00464	.00705	.01148	218.68	.01310
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.2912	1.3029	.07265	306.45	.01209	-.01136	.00775
SDev	.0430	.0026	.00284	3.83	.00469	.01144	.01968
%RSD	.46263	.19978	3.9146	1.2490	38.804	100.70	254.01
#1	9.2524	1.3044	.07512	301.89	.00604	.00580	.02068
#2	9.2711	1.3024	.07512	304.75	.01343	-.01703	.02080
#3	9.3514	1.3053	.07019	310.15	.01158	-.01707	.01036
#4	9.2899	1.2994	.07019	309.01	.01732	-.01712	-.02085
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02445	6.3377	-.00869	.12970	-.00115	.02133	.06327
SDev	.05007	.0000	.02779	.00102	.00096	.03483	.00235
%RSD	204.79	.00047	319.89	.78549	84.112	163.29	3.7153
#1	-.05579	6.3377	.01808	.12847	-.00049	.05924	.06485
#2	-.04011	6.3377	-.01274	.12926	-.00016	.03589	.06485

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#3	.04998	6.3377	.00571	.13056	-.00213	-.02242	.06352
#4	-.05188	6.3377	-.04580	.13052	-.00180	.01262	.05987
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.08576
SDev	.00156
%RSD	1.8215

#1	.08737
#2	.08680
#3	.08418
#4	.08468

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMJEP10F NA Operator: MTW
 Run Time: 08/22/00 15:04:41
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00216	.02788	-.00143	.06778	.00048	.00028	2.2296
SD	.00082	.00602	.03958	.00141	.00034	.00013	.0024
%RSD	37.943	21.597	2760.9	2.0765	69.691	44.814	.10939

#1	.00145	.02072	-.01876	.06592	.00071	.00018	2.2264
#2	.00286	.02967	.05070	.06934	.00050	.00045	2.2305
#3	.00145	.02609	.00436	.06793	.00000	.00018	2.2294
#4	.00288	.03503	-.04203	.06793	.00071	.00031	2.2322

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00276	.00313	.00252	.00265	.00150	43.701	.00114
SD	.00359	.00139	.00075	.00125	.00094	.189	.00040
%RSD	130.21	44.255	29.769	47.066	62.997	.43246	35.216

#1	.00275	.00244	.00359	.00441	.00150	43.873	.00101
#2	.00016	.00244	.00199	.00265	.00283	43.435	.00132
#3	.00028	.00244	.00199	.00177	.00083	43.782	.00065
#4	.00784	.00521	.00252	.00177	.00083	43.716	.00159

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9052	.26904	.01847	61.221	.00386	.02663	.00519
SD	.0013	.00098	.00284	.259	.00303	.00731	.01045
%RSD	.07027	.36591	15.396	.42286	78.683	27.436	201.10

#1	1.9046	.26854	.01601	61.033	.00534	.02092	-.00005
#2	1.9072	.27051	.02093	61.042	.00514	.02091	-.00003
#3	1.9046	.26854	.01601	61.587	-.00068	.02850	-.00000
#4	1.9046	.26855	.02093	61.224	.00563	.03619	.02086

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00979	1.2829	.00054	.02631	-.00025	.00429	.01407
SD	.02485	.0285	.01649	.00007	.00056	.04708	.00180
%RSD	253.87	2.2218	3058.9	.28612	227.71	1096.3	12.774

#1	-.00098	1.2583	.02003	.02637	-.00049	.03056	.01494
#2	-.01664	1.3104	-.00462	.02628	.00049	.05394	.01138

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#3	-.04015	1.2583	-.01900	.02622	-.00082	-.05117	.01494
#4	.01861	1.3046	.00575	.02637	-.00016	-.01616	.01504
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .01894
SDev .00149
%RSD 7.8637

#1	.02077
#2	.01945
#3	.01817
#4	.01738

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMJESF/2 NA Operator: MTW
Run Time: 08/22/00 15:07:50
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02421	1.0071	1.0454	.79563	.98835	.02651	36.481
SDev	.00203	.0061	.0369	.02025	.00897	.00018	.085
%RSD	8.3680	.60275	3.5269	2.5453	.90707	.68203	.23209

#1	.02135	1.0066	1.0753	.77768	.99657	.02677	36.470
#2	.02566	1.0156	1.0791	.77907	.99435	.02650	36.374
#3	.02420	1.0049	1.0175	.80846	.98552	.02639	36.578
#4	.02563	1.0014	1.0098	.81730	.97697	.02639	36.503

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02212	.25097	.10449	.13207	.52812	241.51	.49125
SDev	.00347	.00360	.00176	.00088	.00138	1.87	.00634
%RSD	15.664	1.4351	1.6820	.66811	.26175	.77572	1.2914

#1	.01709	.24678	.10356	.13251	.52779	243.51	.49851
#2	.02371	.25515	.10250	.13252	.52645	242.61	.49430
#3	.02489	.24957	.10569	.13075	.52978	240.50	.48774
#4	.02278	.25237	.10622	.13252	.52844	239.43	.48444

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	34.400	1.5245	.57636	330.13	.27299	.26643	.26884
SDev	.220	.0052	.00246	3.83	.00352	.02583	.03074
%RSD	.63911	.33942	.42728	1.1616	1.2887	9.6962	11.434

#1	34.654	1.5319	.57759	334.46	.27778	.27765	.23748
#2	34.434	1.5220	.57759	331.97	.26936	.23238	.25843
#3	34.394	1.5240	.57759	328.26	.27197	.29295	.26885
#4	34.118	1.5201	.57267	325.83	.27288	.26273	.31059

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99062	11.323	1.0289	.63981	.48947	.97112	.30509
SDev	.02315	.067	.0199	.00521	.00247	.03069	.00245
%RSD	2.3372	.59406	1.9346	.81359	.50534	3.1606	.80349

#1	.96025	11.414	1.0447	.64532	.49258	.97413	.30390
#2	.98767	11.310	1.0160	.64271	.48996	.99734	.30877

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#3	1.0151	11.315	1.0078	.63749	.48865	.92733	.30390
#4	.99943	11.252	1.0471	.63372	.48668	.98569	.30381
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.32107
SDev	.00318
%RSD	.98970

#1	.32430
#2	.32326
#3	.31875
#4	.31796

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMJEDF/2 NA Operator: MTW
Run Time: 08/22/00 15:10:59
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02532	1.0276	1.0412	.81942	1.0007	.02703	37.586
SDev	.00137	.0088	.0401	.00861	.0021	.00006	.127
%RSD	5.4012	.85832	3.8508	1.0502	.20648	.23538	.33914
#1	.02425	1.0405	.98998	.82696	1.0004	.02700	37.699
#2	.02568	1.0208	1.0750	.82556	1.0034	.02713	37.542
#3	.02710	1.0244	1.0287	.80846	1.0006	.02700	37.675
#4	.02425	1.0246	1.0712	.81671	.99837	.02700	37.425
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02144	.25723	.10582	.13451	.53846	245.96	.49481
SDev	.00422	.00181	.00266	.00085	.00163	.68	.00159
%RSD	19.691	.70205	2.5098	.62809	.30356	.27701	.32147
#1	.01641	.25934	.10781	.13429	.53913	245.87	.49251
#2	.01985	.25653	.10303	.13517	.54047	246.93	.49617
#3	.02610	.25792	.10835	.13517	.53713	245.65	.49523
#4	.02341	.25514	.10409	.13340	.53713	245.38	.49532
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	35.090	1.5710	.58868	335.90	.28235	.29127	.28707
SDev	.078	.0040	.01415	1.18	.01244	.02800	.01568
%RSD	.22129	.25268	2.4033	.35166	4.4045	9.6149	5.4624
#1	35.136	1.5742	.59237	335.18	.27986	.32358	.29998
#2	35.165	1.5712	.59730	337.63	.26951	.29314	.27915
#3	35.066	1.5732	.59730	335.69	.28067	.29316	.26884
#4	34.991	1.5653	.56774	335.10	.29938	.25519	.30033
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0661	11.602	1.0675	.65016	.49807	1.0062	.31386
SDev	.0490	.057	.0481	.00122	.00137	.0635	.00028
%RSD	4.5997	.48993	4.5043	.18703	.27583	6.3116	.08770
#1	1.1131	11.605	1.1107	.64976	.49848	.93904	.31394
#2	1.0112	11.605	1.0428	.65159	.49946	1.0908	.31403

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#3	1.1013	11.669	1.0119	.65055	.49815	.98578	.31404
#4	1.0386	11.530	1.1045	.64872	.49618	1.0091	.31346
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.32874
SDev	.00372
%RSD	1.1310

#1	.32348
#2	.33141
#3	.32874
#4	.33132

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMJTF/2 NA Operator: MTW
Run Time: 08/22/00 15:14:07
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00055	.02606	.01895	.26826	.00025	.00024	10.828
SDev	.00071	.00781	.02621	.00918	.00029	.00006	.051
%RSD	128.62	29.951	138.31	3.4211	115.47	26.879	.47395

#1	-.00020	.02926	.00832	.25744	.00000	.00033	10.841
#2	-.00020	.03273	.01986	.27797	.00000	.00021	10.880
#3	-.00163	.01483	-.00701	.26430	.00050	.00021	10.835
#4	-.00020	.02741	.05464	.27333	.00050	.00021	10.757

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00064	.00105	.00427	.01455	.01930	309.04	.01490
SDev	.00257	.00302	.00118	.00088	.00175	.93	.00044
%RSD	400.73	288.29	27.586	6.0765	9.0745	.29954	2.9163

#1	.00155	.00244	.00520	.01499	.01747	310.16	.01434
#2	-.00301	.00106	.00467	.01499	.02080	308.40	.01536
#3	.00299	-.00315	.00255	.01322	.02080	309.44	.01481
#4	.00104	.00384	.00467	.01499	.01814	308.18	.01509

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.0454	1.1686	.08127	305.20	.01547	-.00567	.01013
SDev	.0209	.0031	.00472	1.00	.00420	.01462	.02563
%RSD	.25977	.26614	5.8025	.32636	27.146	258.11	253.11

#1	8.0634	1.1706	.07512	305.80	.01611	-.00181	.03103
#2	8.0500	1.1716	.08497	304.10	.01020	-.01709	-.02126
#3	8.0527	1.1676	.08004	306.25	.01514	-.01717	-.00035
#4	8.0152	1.1647	.08497	304.65	.02042	.01341	.03109

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00191	4.1132	-.00816	.12802	-.00098	.02969	.00645
SDev	.02606	.0000	.01523	.00054	.00042	.05434	.00009
%RSD	1365.9	.00000	186.55	.42070	43.033	183.04	1.4106

#1	-.03228	4.1132	.00375	.12847	-.00147	-.02284	.00634
#2	.00299	4.1132	-.01704	.12743	-.00049	.07056	.00653

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#3	-.00876	4.1132	.00566	.12847	-.00115	-.01117	.00643
#4	.03041	4.1132	-.02502	.12769	-.00082	.08220	.00653

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.01486
SDev	.00148
%RSD	9.9957

#1	.01383
#2	.01672
#3	.01539
#4	.01351

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMKEF/2 NA

Operator: MTW

Run Time: 08/22/00 15:19:02

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00019	.33084	.02442	.35616	.00598	.00034	28.660
SDev	.00071	.01056	.03559	.00198	.00010	.00000	.039
%RSD	384.74	3.1907	145.71	.55542	1.7305	.07132	.13750

#1	-.00126	.31609	-.00633	.35445	.00582	.00034	28.656
#2	.00017	.33395	.05527	.35787	.00603	.00034	28.618
#3	.00017	.34109	.05522	.35445	.00603	.00034	28.653
#4	.00017	.33223	-.00646	.35788	.00603	.00034	28.713

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00005	.00138	.00585	.00292	.67539	124.32	.01633
SDev	.00377	.00071	.00027	.00044	.00274	.45	.00071
%RSD	7555.3	51.163	4.5415	15.091	.40555	.35829	4.3712

#1	.00263	.00103	.00625	.00270	.67189	123.92	.01602
#2	L-.00559	.00244	.00572	.00270	.67722	124.11	.01677
#3	.00195	.00103	.00572	.00270	.67456	124.30	.01704
#4	.00082	.00103	.00571	.00358	.67789	124.95	.01547

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.887	.07667	.00749	266.10	.00619	.02815	.01565
SDev	.044	.00049	.00472	1.15	.01081	.01516	.01347
%RSD	.20856	.64003	62.967	.43221	174.65	53.855	86.069

#1	20.877	.07691	.00626	265.41	.00097	.03575	.02082
#2	20.831	.07593	.01118	265.06	-.00643	.00541	.01037
#3	20.911	.07692	.01118	266.29	.01664	.03570	.00006
#4	20.930	.07691	.00133	267.64	.01358	.03575	.03136

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01255	8.7403	-.00188	.20759	.00622	-.01535	.00503
SDev	.04467	.0426	.02550	.00075	.00033	.02213	.00009
%RSD	355.88	.48689	1359.6	.36066	5.2632	144.17	1.8087

#1	-.01096	8.6882	.00380	.20702	.00573	-.00071	.00501
#2	.04390	8.7403	-.03529	.20728	.00639	-.01246	.00510

#3	-.03838	8.7403	-.00246	.20739	.00639	-.00074	.00510
#4	.05565	8.7924	.02645	.20869	.00639	-.04748	.00491

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.03318
SDev	.00058
%RSD	1.7470

#1	.03331
#2	.03388
#3	.03249
#4	.03303

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: CCV2-13

Operator: MTW

Run Time: 08/22/00 15:22:12

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0179	51.156	5.3003	5.1208	5.1287	5.3578	53.546
SDev	.0018	.091	.0803	.0272	.0126	.0083	.098
%RSD	.17885	.17871	1.5145	.53043	.24524	.15489	.18364
#1	1.0200	51.149	5.2879	5.1398	5.1292	5.3577	53.530
#2	1.0186	51.039	5.1923	5.1260	5.1123	5.3476	53.563
#3	1.0158	51.261	5.3487	5.0810	5.1430	5.3679	53.426
#4	1.0173	51.175	5.3722	5.1364	5.1302	5.3580	53.664
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.3572	5.2080	5.1586	5.1205	52.989	50.724	4.8828
SDev	.0254	.0080	.0117	.0122	.047	.244	.0188
%RSD	.47472	.15285	.22679	.23792	.08879	.48132	.38443
#1	5.3377	5.1986	5.1437	5.1242	52.990	50.501	4.8792
#2	5.3812	5.2083	5.1570	5.1039	52.931	50.914	4.8623
#3	5.3329	5.2070	5.1618	5.1330	52.987	50.956	4.9078
#4	5.3770	5.2180	5.1719	5.1207	53.046	50.526	4.8820
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	52.101	5.1238	5.1378	52.185	5.4816	5.1379	5.2640
SDev	.106	.0046	.0123	.176	.0073	.0452	.0355
%RSD	.20345	.08944	.23967	.33673	.13283	.88024	.67535
#1	52.204	5.1241	5.1563	52.180	5.4721	5.0770	5.2926
#2	51.960	5.1191	5.1317	51.945	5.4892	5.1304	5.2929
#3	52.156	5.1221	5.1317	52.358	5.4803	5.1681	5.2511
#4	52.083	5.1300	5.1317	52.255	5.4846	5.1760	5.2195
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0172	5.1911	5.3292	5.2952	5.0694	10.328	5.1709
SDev	.0442	.0190	.0426	.0107	.0052	.112	.0081
%RSD	.88060	.36674	.79866	.20168	.10196	1.0847	.15680
#1	4.9966	5.2156	5.3453	5.2971	5.0681	10.410	5.1633
#2	5.0317	5.1867	5.3289	5.2810	5.0626	10.352	5.1689

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#3	4.9692	5.1925	5.2711	5.3068	5.0731	10.386	5.1689
#4	5.0712	5.1695	5.3717	5.2959	5.0737	10.164	5.1824
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem	ZN
Units	ppm
Avge	4.9838
SDev	.0091
%RSD	.18295

#1	4.9903
#2	4.9864
#3	4.9703
#4	4.9880

Errors	LC Pass
High	5.5000
Low	4.5000

6691121

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Method: QUANMET Sample Name: CCB13

Operator: MTW

Run Time: 08/22/00 15:25:21

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00144	.03040	-.00415	.00397	.00030	.00076	.01063
SDev	.00117	.00790	.02578	.00762	.00054	.00035	.00618
%RSD	80.973	25.975	621.50	191.67	176.76	45.988	58.150

#1	.00143	.02282	-.04167	-.00105	-.00030	.00035	.00392
#2	.00002	.02460	.00068	.00296	.00030	.00059	.00791
#3	.00288	.03887	.01600	.01504	.00101	.00111	.01833
#4	.00143	.03532	.00839	-.00105	.00021	.00099	.01235

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00125	.00139	.00279	.00132	.00216	1.1426	-.00089
SDev	.00158	.00310	.00236	.00153	.00326	.2285	.00091
%RSD	126.51	222.24	84.477	115.50	150.83	19.996	102.65

#1	.00208	-.00175	.00040	-.00088	-.00050	.88018	-.00177
#2	.00164	.00523	.00359	.00177	-.00050	1.3761	-.00094
#3	.00236	.00243	.00571	.00265	.00616	1.2852	.00038
#4	-.00108	-.00035	.00146	.00176	.00350	1.0289	-.00122

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01406	.00074	.00000	.02257	.00454	.02279	.00785
SDev	.02435	.00049	.00246	.00578	.00533	.02184	.01316
%RSD	173.18	66.688	760840.	25.615	117.44	95.830	167.63

#1	-.01807	.00098	-.00369	.01766	.00877	-.00953	.01049
#2	.01941	-.00000	.00123	.01810	.00774	.03618	.01045
#3	.04084	.00099	.00123	.02972	.00467	.02853	.02092
#4	.01406	.00098	.00123	.02481	-.00302	.03599	-.01046

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01371	.01161	.00723	.00030	.00008	.02039	.00244
SDev	.03539	.00287	.02180	.00049	.00073	.03734	.00285
%RSD	258.20	24.754	301.57	164.76	886.94	183.13	116.52

#1	.01077	.01303	.02008	-.00038	-.00016	-.00581	-.00007
#2	-.04408	.01309	.03036	.00025	-.00082	.00577	.00491

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#3	.02254	.00730	-.00453	.00066	.00082	.07579	.00491
#4	-.04407	.01303	-.01700	.00066	.00049	.00581	.00003

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00059
SDev	.00133
%RSD	225.92

#1	-.00113
#2	.00043
#3	.00098
#4	.00207

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHMJE (RAW) ZN Operator: MTW
 Run Time: 08/22/00 15:31:50
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00067	.90430	.33844	.70646	.03521	.00055	26.203
SDev	.00180	.01295	.04931	.01479	.00024	.00001	.062
%RSD	270.50	1.4325	14.571	2.0930	.67520	1.3859	.23628

#1	-.00030	.92084	.31028	.68836	.03538	.00054	26.236
#2	-.00318	.89404	.37618	.72458	.03538	.00056	26.271
#3	-.00029	.89391	.28348	.70646	.03518	.00054	26.174
#4	.00111	.90840	.38380	.70645	.03488	.00056	26.133

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00247	.00241	.00634	.04920	.57823	465.57	.02731
SDev	.00114	.00114	.00147	.00151	.00581	1.98	.00047
%RSD	46.306	47.372	23.131	3.0614	1.0052	.42504	1.7183

#1	-.00404	.00101	.00460	.04942	.57807	468.29	.02679
#2	-.00257	.00241	.00567	.04854	.58604	465.75	.02734
#3	-.00152	.00380	.00727	.05118	.57673	464.34	.02792
#4	-.00174	.00241	.00780	.04766	.57206	463.91	.02718

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.234	6.4154	.16878	H670.91	.02592	-.01197	.02069
SDev	.076	.0217	.00697	3.68	.00685	.00383	.02254
%RSD	.37665	.33857	4.1270	.54815	26.437	31.969	108.91

#1	20.320	6.4402	.16386	H675.42	.02720	-.01771	.02073
#2	20.250	6.4245	.16879	H672.03	.01879	-.01004	.04153
#3	20.231	6.4068	.17864	H669.33	.03481	-.01001	.03114
#4	20.135	6.3901	.16386	H666.85	.02287	-.01012	-.01062

Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00533	16.385	.00631	.30523	.01540	-.03234	.16660
SDev	.07607	.184	.01472	.00157	.00257	.04800	.00287
%RSD	1426.5	1.1238	233.05	.51296	16.708	148.42	1.7236

#1	-.01513	16.537	.01401	.30740	.01917	-.03513	.16894
#2	.05541	16.520	-.00026	.30531	.01360	-.09366	.16416

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#3	-.10916	16.340	.02229	.30437	.01491	.02306	.16923
#4	.04754	16.143	-.01078	.30385	.01392	-.02365	.16407
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00917
SDev	.00161
%RSD	17.536

#1	.00982
#2	.00828
#3	.01110
#4	.00749

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMJEF(RAW) ZN Operator: MTW
 Run Time: 08/22/00 15:35:04
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00082	.03372	.43649	.70367	.00264	.00049	22.741
SDev	.00082	.00464	.07513	.00342	.00035	.00006	.129
%RSD	100.36	13.761	17.213	.48611	13.206	13.039	.56524
#1	.00153	.03419	.50016	.69854	.00281	.00052	22.882
#2	.00011	.02710	.42689	.70538	.00222	.00039	22.571
#3	.00011	.03770	.48470	.70538	.00302	.00052	22.742
#4	.00154	.03589	.33419	.70537	.00251	.00052	22.768
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00459	.00176	.00595	.01521	.01098	455.16	.02681
SDev	.00324	.00081	.00177	.00044	.00084	3.05	.00060
%RSD	70.479	45.792	29.654	2.8950	7.6297	.67001	2.2228
#1	L-.00748	.00246	.00781	.01499	.01082	452.53	.02754
#2	-.00186	.00105	.00356	.01499	.01214	458.18	.02633
#3	L-.00731	.00107	.00622	.01587	.01014	457.39	.02633
#4	-.00172	.00245	.00622	.01499	.01081	452.53	.02707
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.314	2.7452	.15023	H632.62	.02345	-.00944	.01286
SDev	.070	.0068	.00841	5.87	.00930	.01387	.01575
%RSD	.36198	.24716	5.5993	.92716	39.669	146.96	122.52
#1	19.302	2.7543	.14900	H627.22	.03330	-.00181	.03127
#2	19.340	2.7405	.13915	H639.65	.01267	-.02465	-.00032
#3	19.390	2.7464	.15392	H635.21	.01912	.00573	.02067
#4	19.224	2.7396	.15885	H628.40	.02870	-.01702	-.00020
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00003	13.550	-.00301	.26764	-.00147	.03777	.12968
SDev	.05470	.048	.03098	.00145	.00060	.04721	.00016
%RSD	189090.	.35650	1027.8	.54273	40.572	125.01	.12699
#1	-.06363	13.560	-.02707	.26706	-.00082	.10204	.12966
#2	.00297	13.583	.04058	.26941	-.00180	.00854	.12946

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#3	.06957	13.577	-.02301	.26810	-.00213	-.00308	.12975
#4	-.00879	13.479	-.00256	.26601	-.00115	.04357	.12984
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.15526
SDev	.00150
%RSD	.96678

#1	.15602
#2	.15477
#3	.15684
#4	.15341

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMK5 (RAW) ZN Operator: MTW
Run Time: 08/22/00 15:38:18
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00043	.23974	1.0695	.44762	.01005	.00027	62.759
SDev	.00137	.01713	.1149	.00003	.00000	.00007	.438
%RSD	316.09	7.1457	10.746	.00712	.00000	27.330	.69775
#1	.00151	.26514	1.2092	.44767	.01005	.00033	63.401
#2	.00008	.22941	1.0744	.44761	.01005	.00021	62.656
#3	.00150	.23488	1.0667	.44760	.01005	.00021	62.547
#4	-.00135	.22951	.92780	.44760	.01005	.00033	62.432
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	L-.01145	-.00034	.00840	.00604	1.1129	604.26	.04174
SDev	.00344	.00197	.00043	.00084	.0146	1.78	.00045
%RSD	30.060	586.13	5.1703	13.970	1.3093	.29401	1.0740
#1	L-.01371	-.00312	.00893	.00714	1.1346	603.17	.04139
#2	L-.00647	-.00035	.00787	.00538	1.1086	604.22	.04186
#3	L-.01379	.00107	.00840	.00538	1.1039	602.88	.04139
#4	L-.01183	.00106	.00840	.00626	1.1046	606.79	.04233
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	40.436	1.1092	.09006	389.49	.01182	.00912	.03869
SDev	.076	.0059	.00569	1.18	.01319	.03124	.02309
%RSD	.18819	.52949	6.3171	.30173	111.66	342.52	59.673
#1	40.448	1.1178	.09499	388.37	.00837	.02798	.03082
#2	40.395	1.1079	.09498	389.86	.01057	-.01741	.05165
#3	40.363	1.1060	.08513	388.75	-.00162	-.01736	.06218
#4	40.537	1.1050	.08513	390.97	.02994	.04327	.01010
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.02449	11.184	.00345	.33416	.00786	.03266	.00663
SDev	.09884	.051	.03192	.00116	.00068	.03355	.00011
%RSD	403.57	.45338	926.59	.34660	8.6736	102.71	1.6572
#1	-.14295	11.259	-.01662	.33576	.00868	.02375	.00673
#2	-.00589	11.161	.03073	.33394	.00803	.08233	.00673

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#3	-.04508	11.167	-.03086	.33300	.00704	.01229	.00654
#4	.09596	11.149	.03053	.33394	.00770	.01228	.00654
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00772
SDev	.00133
%RSD	17.256

#1	.00852
#2	.00875
#3	.00778
#4	.00582

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DHMK5F(RAW) ZN Operator: MTW
 Run Time: 08/22/00 15:41:31
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00118	.03720	1.0018	.44649	.00402	.00030	57.698
SDev	.00137	.00750	.2730	.00317	.00101	.00006	.384
%RSD	116.16	20.165	27.253	.70982	25.000	21.107	.66628
#1	-.00011	.04703	1.3703	.44584	.00352	.00033	57.862
#2	-.00153	.03457	.96521	.44986	.00553	.00033	57.865
#3	-.00296	.02916	.71054	.44784	.00352	.00021	57.124
#4	-.00011	.03806	.96132	.44242	.00352	.00033	57.941
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.00926	-.00068	.00640	.00244	.18307	586.89	.03981
SDev	.00380	.00134	.00140	.00111	.00346	3.01	.00047
%RSD	41.010	199.20	21.859	45.515	1.8872	.51202	1.1749
#1	L-.01241	-.00032	.00733	.00266	.18457	587.74	.03990
#2	L-.01267	.00108	.00520	.00266	.18457	584.52	.03924
#3	L-.00634	-.00173	.00520	.00089	.17791	590.78	.04037
#4	L-.00563	-.00173	.00786	.00354	.18523	584.53	.03971
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	39.265	.90849	.08253	382.81	.01529	.02841	.02830
SDev	.093	.00326	.00284	2.82	.01586	.03095	.01008
%RSD	.23770	.35925	3.4461	.73794	103.77	108.93	35.618
#1	39.345	.91193	.08499	383.45	.01879	.05119	.04134
#2	39.131	.90898	.08007	381.00	.03351	-.01706	.03115
#3	39.302	.90406	.08007	386.53	-.00492	.03596	.02033
#4	39.284	.90898	.08499	380.27	.01378	.04354	.02036
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.03772	10.643	.02482	.31043	-.00033	.01195	.00648
SDev	.08045	.026	.02196	.00170	.00042	.09971	.00006
%RSD	213.31	.24537	88.465	.54873	129.10	834.71	.88975
#1	-.14937	10.622	.03464	.31225	-.00049	-.04936	.00653
#2	.00342	10.628	.00378	.30938	.00016	.14913	.00643

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#3	-.03969	10.680	.00989	.31147	-.00082	.02074	.00643
#4	.03477	10.640	.05098	.30864	-.00016	-.07273	.00653

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.17248
SDev	.00200
%RSD	1.1577

#1	.17136
#2	.17023
#3	.17408
#4	.17424

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMJKE(RAW) CA Operator: MTW
 Run Time: 08/22/00 15:44:45
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00079	8.5266	1.3995	.71498	.33857	.00151	H616.03
SDev	.00316	.0205	.2256	.00304	.00168	.00006	3.08
%RSD	398.86	.24055	16.118	.42557	.49479	4.2261	.49960
#1	-.00400	8.5016	1.6457	.71753	.34083	.00161	H612.39
#2	.00315	8.5517	1.5140	.71755	.33882	.00147	H617.71
#3	.00024	8.5248	1.3022	.71332	.33752	.00149	H614.72
#4	-.00256	8.5285	1.1360	.71153	.33711	.00147	H619.29
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.01811	.00777	.03826	.04097	18.895	176.96	.04357
SDev	.00399	.00321	.00200	.00112	.055	.30	.00021
%RSD	22.037	41.364	5.2414	2.7226	.29242	.17085	.48244
#1	L-.02406	.00500	.04025	.04119	18.909	177.00	.04365
#2	L-.01593	.01054	.03865	.04208	18.925	177.35	.04365
#3	L-.01671	.00498	.03547	.03942	18.813	176.62	.04373
#4	L-.01573	.01057	.03865	.04120	18.931	176.88	.04326
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	134.38	1.1780	.00898	H574.99	.02946	.08734	.04705
SDev	.53	.0033	.00402	1.38	.00404	.02139	.02769
%RSD	.39419	.27689	44.707	.24084	13.705	24.491	58.860
#1	133.66	1.1758	.00406	H576.48	.03201	.08728	.05242
#2	134.77	1.1798	.00899	H575.81	.03378	.10255	.03136
#3	134.30	1.1748	.01390	H574.13	.02597	.10242	.02080
#4	134.79	1.1817	.00899	H573.53	.02606	.05711	.08360
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.08538	H23.919	-.01240	5.6537	.07953	.00082	.05723
SDev	.15530	.048	.03942	.0212	.00667	.07170	.00226
%RSD	181.90	.19976	317.91	.37447	8.3911	8759.2	3.9508
#1	L-.31551	H23.925	-.06682	5.6829	.07879	.06198	.05745
#2	-.00989	H23.972	.01113	5.6547	.08862	.00340	.05876

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#3	-.03760	H23.856	.02137	5.6342	.07814	-.10049	.05397
#4	.02147	H23.925	-.01528	5.6433	.07257	.03838	.05876

Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	1.0274
SDev	.0015
%RSD	.14667

#1	1.0279
#2	1.0258
#3	1.0293
#4	1.0266

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-14 Operator: MTW
Run Time: 08/22/00 15:47:59
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.98957	50.193	5.2084	5.0499	5.0688	5.2816	51.554
SDev	.00217	.148	.0648	.0153	.0218	.0179	.094
%RSD	.21920	.29542	1.2450	.30244	.42913	.33897	.18153
#1	.98631	50.068	5.1344	5.0396	5.0547	5.2760	51.448
#2	.99063	50.147	5.2918	5.0536	5.0665	5.2662	51.640
#3	.99060	50.147	5.1954	5.0364	5.0537	5.2766	51.625
#4	.99073	50.408	5.2121	5.0699	5.1002	5.3074	51.503
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.1792	5.0694	5.0095	5.0786	51.636	50.088	4.8702
SDev	.0033	.0112	.0055	.0245	.109	.088	.0344
%RSD	.06279	.22115	.10987	.48264	.21167	.17669	.70536
#1	5.1835	5.0694	5.0012	5.0684	51.502	50.187	4.8531
#2	5.1791	5.0805	5.0124	5.0676	51.664	50.022	4.8606
#3	5.1755	5.0540	5.0119	5.0631	51.612	50.005	4.8461
#4	5.1787	5.0735	5.0124	5.1152	51.764	50.137	4.9209
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	51.156	4.9746	4.9886	51.782	5.3470	4.9735	5.1627
SDev	.128	.0109	.0180	.303	.0165	.0607	.0499
%RSD	.25043	.21998	.36079	.58550	.30850	1.2212	.96626
#1	51.114	4.9603	4.9689	51.685	5.3677	4.9982	5.1057
#2	51.079	4.9810	5.0083	51.703	5.3280	4.9910	5.1989
#3	51.084	4.9722	4.9788	51.520	5.3497	5.0205	5.1364
#4	51.347	4.9850	4.9985	52.220	5.3425	4.8844	5.2097
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.1595	5.0622	5.1286	5.2293	4.9665	10.072	5.0519
SDev	.0365	.0281	.0567	.0196	.0143	.144	.0081
%RSD	.70815	.55498	1.1058	.37526	.28806	1.4340	.16088
#1	5.1886	5.0462	5.1021	5.2168	4.9535	10.064	5.0497
#2	5.1655	5.1041	5.1580	5.2264	4.9636	9.9106	5.0492

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#3	5.1066	5.0520	5.1906	5.2163	4.9620	10.262	5.0450
#4	5.1775	5.0464	5.0635	5.2579	4.9869	10.050	5.0637

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem	ZN
Units	ppm
Avge	4.8268
SDev	.0173
%RSD	.35932

#1	4.8017
#2	4.8355
#3	4.8294
#4	4.8406

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB14

Operator: MTW

Run Time: 08/22/00 15:51:08

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00107	.01785	-.00979	.00790	.00020	.00045	.01252
SDev	.00071	.00820	.04834	.01433	.00014	.00006	.00487
%RSD	66.676	45.916	493.63	181.47	69.881	14.286	38.937
#1	.00143	.02995	-.01471	.02932	.00021	.00048	.01444
#2	.00143	.01566	.02400	.00035	.00000	.00035	.00638
#3	-.00000	.01206	-.07632	.00236	.00030	.00048	.01138
#4	.00143	.01374	.02786	-.00045	.00030	.00048	.01786
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00033	-.00105	.00160	-.00022	-.00033	.79960	-.00114
SDev	.00167	.00080	.00140	.00084	.00148	.12987	.00077
%RSD	509.45	76.655	87.592	381.41	441.20	16.241	67.879
#1	.00139	-.00035	.00359	.00088	.00017	.78101	-.00229
#2	-.00216	-.00174	.00093	-.00088	-.00183	.62398	-.00075
#3	.00117	-.00035	.00146	-.00088	-.00117	.91324	-.00075
#4	.00091	-.00175	.00040	-.00000	.00150	.88018	-.00075
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00268	.00025	.00246	.01509	-.00004	.00189	.02085
SDev	.00962	.00049	.00620	.00561	.00536	.02515	.02254
%RSD	359.40	199.05	251.67	37.195	12770.	1333.2	108.08
#1	.01138	-.00000	.00123	.02257	-.00299	-.01703	.05213
#2	-.00736	.00098	-.00369	.00961	-.00041	-.01711	.01047
#3	-.00469	-.00000	.00123	.01229	-.00438	.00567	-.00006
#4	-.01004	.00000	.01108	.01587	.00761	.03601	.02087
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00098	-.04343	.00318	-.00023	-.00057	.03505	.00005
SDev	.03872	.02606	.00784	.00008	.00056	.07538	.00012
%RSD	3956.5	60.000	246.32	32.787	97.590	215.08	234.29
#1	-.03624	-.05646	.01206	-.00027	.00016	.05255	.00003
#2	-.01666	-.05646	-.00662	-.00027	-.00115	.07594	-.00007

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#3	.05387	-.05646	.00154	-.00012	-.00082	-.07589	.00003
#4	.00294	-.00434	.00575	-.00027	-.00049	.08758	.00021

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00198
SDev	.00162
%RSD	81.924

#1	.00309
#2	.00099
#3	.00023
#4	.00360

Errors	LC Pass
High	.02000
Low	-.02000

6691137

STL-Pittsburgh Atomic Absorption Data for Mercury

Instrument: PS200HG

Analyst Name: William C. Hoyle

Date of Analysis: 8-21-00

File ID: 0821HGA

Matrix: WATER

Lot Number/SDG

Method

COH190213

7470A

COH100270

COH160154

TCLP

COH170113



COH160223

SPLP

09:46:17 21 Aug 2000

Folder: 0821HGA
Protocol: HGMET

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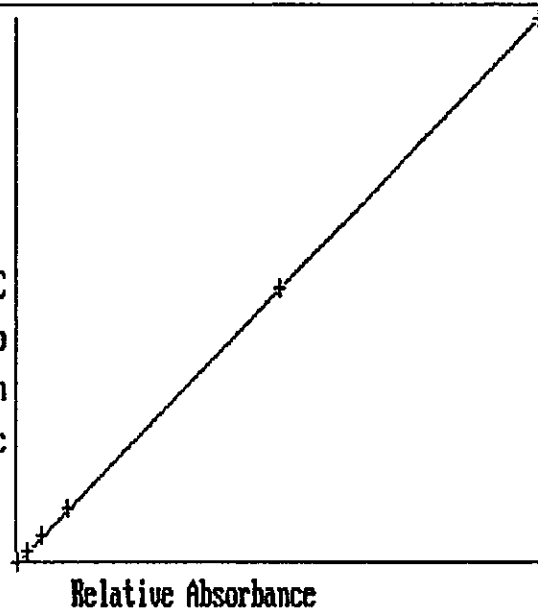
Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1				Seq: 0	09:46:17 21 Aug 2000 HG			
Hg	.000	ppb	4037					
*** Standard: 2 Rep: 1				Seq: 1	09:48:28 21 Aug 2000 HG			
Hg	.200	ppb	23272	0057-031-6				
*** Standard: 3 Rep: 1				Seq: 2	09:50:05 21 Aug 2000 HG			
Hg	.500	ppb	52381	0057-031-7				
*** Standard: 4 Rep: 1				Seq: 3	09:51:32 21 Aug 2000 HG			
Hg	1.00	ppb	103935	0057-031-8				
*** Standard: 5 Rep: 1				Seq: 4	09:53:12 21 Aug 2000 HG			
Hg	5.00	ppb	533550	0057-031-9				
*** Standard: 6 Rep: 1				Seq: 5	09:54:49 21 Aug 2000 HG			
Hg	10.0	ppb	1059674	0057-031-10				

6691139

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
 RunFold: 0021HGA Seq: 6 Batch:
 Prnt: R/T On Pump: On
 Rev: 4.2 09:55:11 21 Aug 2000 Xmit: Off Gas: 0.30 LPM
 State: Idle User: WAH A/S: On

CALIBRATION: Line proto: HGMET

	Hg	Accepted	
	Conc.	Calc.	Dev. ->linear
S1	.000	.026	.026 Quadratic
S2	.200	.207	.007 Wtdlinear
S3	.500	.482	-.018
S4	1.00	.969	-.031 Accept
S5	5.00	5.02	.025
S6	10.0	9.99	-.009
A	.0000000	r	.999983
B	9.44031e-6	C	-1.23354e-2



	Mean	SD	%RSD
S1	4037	0	4037
S2	23272	0	23272
S3	52301	0	52301
S4	103935	0	103935
S5	533550	0	533550
S6	1059674	0	1059674

New cal coefficients stored

09:57:19 21 Aug 2000 Folder: 0821HGA Page 221
Protocol: HGMET

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: ICV5-1				Seq: 6		09:57:19 21 Aug 2000	HG	
Hg	2.55	ppb	271584	0057-031-11				
*** Sample ID: ICB1				Seq: 7		09:59:38 21 Aug 2000	HG	
Hg	.038	ppb	5330					
*** Sample ID: CCV5-1				Seq: 8		10:01:12 21 Aug 2000	HG	
Hg	5.04	ppb	535362	0057-031-12				
*** Sample ID: CCB1				Seq: 9		10:02:42 21 Aug 2000	HG	
Hg	.010	ppb	2411					
*** Sample ID: DJ5H1B				Seq: 10		10:05:00 21 Aug 2000	HG	
Hg	.031	ppb	4602					
*** Sample ID: DJ5H1C				Seq: 11		10:06:30 21 Aug 2000	HG	
Hg	2.49	ppb	265382	0057-031-13				
*** Sample ID: DJ401				Seq: 12		10:08:31 21 Aug 2000	HG	
Hg	.036	ppb	5082					
*** Sample ID: DJ40H				Seq: 13		10:10:16 21 Aug 2000	HG	
Hg	.133	ppb	15382					
*** Sample ID: DJ430				Seq: 14		10:11:47 21 Aug 2000	HG	
Hg	.094	ppb	11306					
*** Sample ID: DJ430S				Seq: 15		10:14:03 21 Aug 2000	HG	
Hg	1.16	ppb	124267					SP.REC. 107%
*** Sample ID: DJ430D				Seq: 16		10:15:38 21 Aug 2000	HG	
Hg	1.14	ppb	121912					SP.REC. 105%
*** Sample ID: DJ43R				Seq: 17		10:17:13 21 Aug 2000	HG	
Hg	.078	ppb	9544					

6691141

Folder: 0821HGA
Protocol: HGMET

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10:18:50 21 Aug 2000

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DJ44A				Seq: 18		10:18:50 21 Aug 2000 HG		
Hg	1.15	ppb	123532					
*** Sample ID: DJ45E				Seq: 19		10:20:18 21 Aug 2000 HG		
Hg	1.46	ppb	155832					
*** Sample ID: CCV5-2				Seq: 20		10:22:03 21 Aug 2000 HG		
Hg	5.17	ppb	549015					
*** Sample ID: CCB2				Seq: 21		10:23:29 21 Aug 2000 HG		
Hg	.016	ppb	2978					
*** Sample ID: DJ5H6B				Seq: 22		10:25:14 21 Aug 2000 HG		
Hg	.032	ppb	4653					
*** Sample ID: DJ5H6C				Seq: 23		10:26:42 21 Aug 2000 HG		
Hg	2.48	ppb	264071		0057-031-14			
*** Sample ID: DHN80				Seq: 24		10:28:17 21 Aug 2000 HG		
Hg	.049	ppb	6454					
*** Sample ID: DHN88				Seq: 25		10:29:42 21 Aug 2000 HG		
Hg	.078	ppb	9565					
*** Sample ID: DHN88S				Seq: 26		10:31:07 21 Aug 2000 HG		
Hg	1.05	ppb	112945					SP. REC. 97%
*** Sample ID: DHN88D				Seq: 27		10:33:07 21 Aug 2000 HG		
Hg	1.07	ppb	114159					SP. REC. 97%
*** Sample ID: DHN89				Seq: 28		10:34:42 21 Aug 2000 HG		
Hg	.153	ppb	17560					
*** Sample ID: DHN8C				Seq: 29		10:36:06 21 Aug 2000 HG		
Hg	.303	ppb	33439					

10:37:32 21 Aug 2000

Folder: 0821HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DHN8H				Seq: 30		10:37:32 21 Aug 2000	HG	
Hg	.318	ppb	34984					
*** Sample ID: DHN8P				Seq: 31		10:39:38 21 Aug 2000	HG	
Hg	.048	ppb	6444					
*** Sample ID: CCV5-3				Seq: 32		10:41:03 21 Aug 2000	HG	
Hg	5.18	ppb	549519					
*** Sample ID: CCB3				Seq: 33		10:42:52 21 Aug 2000	HG	
Hg	.025	ppb	3970					
*** Sample ID: DHN8V				Seq: 34		10:44:32 21 Aug 2000	HG	
Hg	.029	ppb	4404					
*** Sample ID: DHN90				Seq: 35		10:46:43 21 Aug 2000	HG	
Hg	.064	ppb	8040					
*** Sample ID: DHN93				Seq: 36		10:48:20 21 Aug 2000	HG	
Hg	.021	ppb	3489					
*** Sample ID: DHN94				Seq: 37		10:49:45 21 Aug 2000	HG	
Hg	.047	ppb	6257					
*** Sample ID: DJ5H9BT				Seq: 38		10:51:37 21 Aug 2000	HG	
Hg	.062	ppb	7914					
*** Sample ID: DJ5H9CT				Seq: 39		10:53:27 21 Aug 2000	HG	
Hg	2.70	ppb	287145					
*** Sample ID: DJ3ACBT				Seq: 40		10:54:58 21 Aug 2000	HG	
Hg	.070	ppb	8685					
*** Sample ID: DHX40T				Seq: 41		10:56:28 21 Aug 2000	HG	
Hg	.097	ppb	11554					

0057-031-15

6691143

10:58:06 21 Aug 2000

Folder: 0821HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DHX40ST				Seq: 42		10:58:06 21 Aug 2000	HG	
Hg	5.27	ppb	559903					SP.REC. 103%
*** Sample ID: DHX40DT				Seq: 43		11:00:22 21 Aug 2000	HG	
Hg	5.10	ppb	541302					SP.REC. 100%
*** Sample ID: CCV5-4				Seq: 44		11:01:59 21 Aug 2000	HG	
Hg	5.22	ppb	554120					
*** Sample ID: CCB4				Seq: 45		11:03:44 21 Aug 2000	HG	
Hg	.043	ppb	5881					
*** Sample ID: DHX47T				Seq: 46		11:05:12 21 Aug 2000	HG	
Hg	.029	ppb	4383					
*** Sample ID: DHX4AT				Seq: 47		11:06:53 21 Aug 2000	HG	
Hg	.067	ppb	8380					
*** Sample ID: DJOQLT				Seq: 48		11:08:43 21 Aug 2000	HG	
Hg	.351	ppb	38452					
*** Sample ID: DJSHDBE				Seq: 49		11:10:20 21 Aug 2000	HG	
Hg	.079	ppb	9698					
*** Sample ID: DJ5HDCE				Seq: 50		11:12:26 21 Aug 2000	HG	
Hg	2.50	ppb	266441					
*** Sample ID: DHXN9E				Seq: 51		11:13:55 21 Aug 2000	HG	
Hg	.035	ppb	4995					
*** Sample ID: DHXN9SE				Seq: 52		11:15:20 21 Aug 2000	HG	
Hg	1.05	ppb	112739					SP.REC. 105%
*** Sample ID: DHXN9DE				Seq: 53		11:17:08 21 Aug 2000	HG	
Hg	1.05	ppb	112513					SP.REC. 105%

0057-031-16

11:18:33 21 Aug 2000

Folder: 0821HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: DHXNDE Seq: 54 11:18:33 21 Aug 2000 HG

Hg .037 ppb 5229

*** Sample ID: DHXNFE Seq: 55 11:20:05 21 Aug 2000 HG

Hg .041 ppb 5646

*** Sample ID: CCV5-5 Seq: 56 11:23:21 21 Aug 2000 HG

Hg 5.20 ppb 552048

*** Sample ID: CCB5 Seq: 57 11:25:29 21 Aug 2000 HG

Hg .024 ppb 3892

END OF ANALYSIS

WAH
8-21-00

6691145

Mullion a Hyle 8-21-00

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
RunFold: 0821HGA Seq: 0 Batch:
Prnt: R/T On Pump: Off
Rev: 4.2 08:49:01 21 Aug 2000 Xmit: Off Gas: LPM
State: Idle User: WAH A/S: On

AUTOSAMPLER: Rack Edit rack: RACK1

cup ID	Extended id	Weight	Volume	Macro	check macros
1 ICV5-1		1.0000	1.0000		
2 ICB1		1.0000	1.0000		
3 CCV5-1		1.0000	1.0000		
4 CCB1		1.0000	1.0000		
5 DJ5H1B		1.0000	1.0000		
6 DJ5H1C		1.0000	1.0000		
7 DJ401		1.0000	1.0000		
8 DJ40H		1.0000	1.0000		
9 DJ430		1.0000	1.0000		
10 DJ430S		1.0000	1.0000		
11 DJ430D		1.0000	1.0000		
12 DJ43R		1.0000	1.0000		
13 DJ44A		1.0000	1.0000		
14 DJ45E		1.0000	1.0000		
15 CCV5-2		1.0000	1.0000		

PgDn

Cup 1 ID: ICV5-1

Cell down mode Ins to switch

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
RunFold: 0821HGA Seq: 0 Batch:
Prnt: R/T On Pump: Off
Rev: 4.2 08:49:03 21 Aug 2000 Xmit: Off Gas: LPM
State: Idle User: WAH A/S: On

AUTOSAMPLER: Rack Edit rack: RACK1 PgUp
cup ID Extended id Weight Volume Macro check macros
16 CCB2 1.0000 1.0000
17 DJ5H6B 1.0000 1.0000
18 DJ5H6C 1.0000 1.0000
19 DHN80 1.0000 1.0000
20 DHN8B 1.0000 1.0000
21 DHN8BS 1.0000 1.0000
22 DHN8BD 1.0000 1.0000
23 DHN89 1.0000 1.0000
24 DHN8C 1.0000 1.0000
25 DHN8H 1.0000 1.0000
26 DHN8P 1.0000 1.0000
27 CCV5-3 1.0000 1.0000
28 CCB3 1.0000 1.0000
29 DHN8V 1.0000 1.0000
30 DHN90 1.0000 1.0000

PgDn

Cup 16 ID: CCB2

Cell down mode Ins to switch

6691147

RunProt: HGMET	STL-PITTSBURGH METALS ANALYSIS		
RunFold: 0821HGA	Seq: 0	Batch:	
	Prnt: R/T On	Pump: Off	
State: Idle	Rev: 4.2	08:49:04 21 Aug 2000	Xmit: Off Gas: LPM
		User: WAH	A/S: On

AUTOSAMPLER: Rack Edit rack: RACK1 PgUp

cup ID	Extended id	Weight	Volume	Macro	check macros
31 DHN93		1.0000	1.0000		
32 DHN94		1.0000	1.0000		
33 DJ5H9BT		1.0000	1.0000		
34 DJ5H9CT		1.0000	1.0000		
35 DJ3ACBT		1.0000	1.0000		
36 DHX40T		1.0000	1.0000		
37 DHX40ST		1.0000	1.0000		
38 DHX40DT		1.0000	1.0000		
39 CCV5-4		1.0000	1.0000		
40 CCB4		1.0000	1.0000		
41 DHX47T		1.0000	1.0000		
42 DHX4AT		1.0000	1.0000		
43 DJ0QLT		1.0000	1.0000		
44 DJ5HDBE		1.0000	1.0000		

PgDn

Cup 31 ID: DHN93	Cell down mode Ins to switch

RunProt: HGMET	STL-PITTSBURGH METALS ANALYSIS		
RunFold: 0821HGA	Seq: 0	Batch:	
	Prnt: R/T On	Pump: Off	
	Rev: 4.2	08:52:27 21 Aug 2000	Xmit: Off Gas: LPM
State: Idle		User: WAH	A/S: On

AUTOSAMPLER:		Rack Edit	rack: RACK2	Range 1-44	Clear seQ	Undo eXit
cup ID	Extended id	Weight	Volume	Macro	check macros	
1	DJ5HDCE	1.0000	1.0000			
2	DHYN9E	1.0000	1.0000			
3	DHYN9SE	1.0000	1.0000			
4	DHYN9DE	1.0000	1.0000			
5	DHYNDE	1.0000	1.0000			
6	DHYNFE	1.0000	1.0000			
7	CCV5-5	1.0000	1.0000			
8	CCB5	1.0000	1.0000			
9		1.0000	1.0000			
10		1.0000	1.0000			
11		1.0000	1.0000			
12		1.0000	1.0000			
13		1.0000	1.0000			
14		1.0000	1.0000			
15		1.0000	1.0000			

PgDn

Cup 14 ID:

Cell down mode Ins to switch

TCLP (Method 1311)

Quanterra Incorporated
450 William Pitt Way
Pittsburgh, Pennsylvania 15238
412/826-5477 FAX: 412/826-5571



QUA-1181

File Lot # 8300101W

Serial Number 085 Log Book Number 96-MT-526

By James Murphy Date 8-17-00

Checked by Susan Faust

Date 8-18-00

pH Instrument

Probe S/N 0054651

Balance

244817

Project Number

Lot Number

Client Codes

Solution Number 1 - Log Book Number

Solution Number 2 - Log Book Number

COH 160154, COH 110115

DO4497-12

Fluid Determination

TCLP Extraction

Sample ID	Wgt/Vol	Init. pH	Final pH	Extract Fluid #1, or #2	Conc: HNO3 to Acidity (for Metals)	Sample ID	Wgt (g) Wet/Dry	Fluid Vol.	Glass	Final pH After Tumbling
DAH46	5.0g/46.5ml	5.49	1.91	Soln #1	100ml	1. PB-TCLP	100.0g	2000ml	Glass	4.93
DAH47		5.51	1.96			2. DAH46				5.08
DAH4A		5.51	1.61			3. DAH47				5.09
DJ00L		5.75	1.79			4. DAH47				5.04
						5. DAH4A				5.53
						6. DJ00L				
						7.				
						8.				
						9.				
						10.				
						11.				
						12.				
						13.				

Extract(s)

(Record line number from above)

Extract(s) Received

Location

Date

Time

Analyst

Location

All above

8-15-00

11:00

James Murphy

Mt. Lebanon

8-18-00

11:30

Alu

175

* = Sample determined to have free-liquid, % solid determination was performed.

<5 = Extraction Fluid No. 1 5.7 mL Glacial Acetic Acid dil 500 mL + 64.3 mL of 1N Na OH dil to 1L (pH 4.93 ± 0.05)

>5 = Extraction Fluid No. 2 5.7 mL Glacial Acetic Acid dil to 1L (pH 2.88 ± 0.05)

Date/Time On

Date/Time Off

Agitation Apparatus RPMs

8-17-00 1:00

8-18-00

(4.0)

(7.0)

(10.0)

pH Calibration

Date

8-17-00

4.01

7.02

10.05

Date

8-19-00

4.00

7.02

10.05

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

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37

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47

Room temp = 21° pH E.T. = 4.98

STL P

6691150

Metals Preparation Log



STL Pittsburgh
450 William Pitt Way
Pittsburgh, PA 15238
412-820-8380

Method: <u>SOIC A</u>		Matrix: <u>Water</u>		Sgt Time: <u>05:25</u>		SDG: _____		Balance# _____		Reagents: <u>3ml conc. HNO₃</u> <u>5ml 1:1 HCl</u> <u>6.33M 50% H₂O₂</u>			
Analyst: <u>D. Sauer</u>		Date: <u>8-21-00</u>		Lot Number: <u>COH160154</u> <u>COH70113</u>		Lab Lot No. (book, page, line): <u>0014-162-L</u> <u>MS MS-61REV</u>		0014-154-2		<u>0057-029-9</u>			
Revised By: _____		Date: _____											
Sample ID		Init Wt/Vol g/mL	Final Vol mL	Comments		Color Pre Post		Clarity Pre Post		Texture Pre Post		Artifacts	Artifact Codes
1. DHX40	50mL	50mL	5-6-8-21-00 5-6-8-21-00 5-6-8-21-00									S=Stones O=Organic (plant mat) W=free H ₂ O G=Glass M=Metal Fragments R=Rubber/Plastic C=Cloth P=Paper I=Insects	
2. DHX40 S													
3. DHX40 D													
4. DHX42													
5. DHX44													
6. D50Q1													
7. D53AC B													
8. D55HP B													
9. D55HE C													
10.													
11.													
12.													
13.													
14.													
15.													
16.													
17.													
18.													
19.													
20.													
21.													
22.													
23.													
24.													
Digestate(s)		Date	Time	Analyst	Location	Date	Time	Analyst	Location	Hot plate /Block Temp #11	Correction Factor -0.15	Color	
H11 Above		8-21-00	11:10	D. Sauer	Metals Lab	8-21-00	11:15	D. Sauer	Metals Lab	95°	-0.15	R=Red BL=Blue BR=Brown BLK=Black Y=Yellow O=Orange	V=Violet P=Pink W=White GY=Gray GN=Green C=Colorless
A11 Above		8-22-00	07:15	D. Sauer	Metals Lab	8-22-00	09:15	D. Sauer	Metals Lab				

6691151

Hg Digestion Log

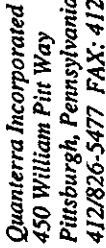
Quanterra Incorporated
450 William Pitt Way
Pittsburgh, Pennsylvania 15238
412/826-5477 FAX: 412/826-5571

Environmental
Services

Serial Number	055	Log Book Number	96-MI-580	Start Time	08:15 → 08:30

Sample ID	Date Rec'd	Prep Date	Prepared By	Wt/Vol	Sample Type	Run Date	Comments
1. STD0	N/A	8-31-00	WJAH	100 ml	WATER	8-31-00	N/A
2. STD1							0057-031-6
3. STD2							0057-031-7
4. STD3							0057-031-8
5. STD4							0057-031-9
6. STD5							0057-031-10
7. ICV							0057-031-11
8. ICB							N/A
9. CCV							0057-031-12
10. CCB							N/A
11. DJ5H18							↓
12. DJ5H1C							0057-031-13
13. DJ401	8-18-00						N/A
14. DJ40H							↓
15. DJ430							N/A
16. DJ430S							↓
17. DJ430D							+1 ml 0057-031-4
18. DJ43R							N/A
19. DJ44A							↓
20. DJ45E							↓
21. DJ5H6B	N/A						↓
22. DJ5H6C	↓						0057-031-14
23. DJ480	8-18-00						N/A
24. DJ488							↓
25. DJ488S							+1 ml 0057-031-4
Reagents	Vol (mL)	Ref. Number	Method				
HNO3	2.5 ml	MAILING ROAD 6623 T09A05	7470A AUTOCALVE 15 PSI 120°C				
H2SO4	5.0 ml	MAILING ROAD 5557 N21A13	5057-025-3				
KMNO4	15.0 ml	0057-027-5	0057-025-8				
K2S2O4	8.0 ml	0057-027-6	MAILING ROAD 8-31-00				
Extract(s)	Extract(s) Received			Extract(s) Relinquished			
(Record line number from above)	Date	Time	Analyst	Location	Date	Time	Analyst
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							
46							
47							
48							
49							
50							

Quanterra Incorporated
450 William Pitt Way
Pittsburgh, Pennsylvania 15238
412/826-5477 FAX: 412/826-5571



Serial Number	Log Book Number	Start Time
056	96-MI-580	08:15-08:30

Sample ID	Date Rec'd	Prep Date	Prepared By	Wt/Vol	Sample Type	Run Date	Comments
1. DH488D	8-10-00	8-21-00	WAH	100ml	WATER	8-21-00	+1ml 0057-031-4
2. DH489							N/A
3. DH48C							
4. DH48H							
5. DH48P							
6. DH48V							
7. DH48N							
8. DH48S							
9. DH48Y							
10. DJ5H9BT							
11. DJ5H9CT							0057-031-15
12. DJ3ACBT							N/A
13. DHX4BT	8-16-00						
14. DHX4OST							+5ml 0057-031-4
15. DHX4ODT							+5ml 0057-031-4
16. DHX47T							N/A
17. DHX4AT							
18. DJ5OQT	8-17-00						
19. DJ5HDBE							
20. DJ5HDBE							0057-031-16
21. DHX49E	8-16-00						N/A
22. DHX49SE							+1ml 0057-031-4
23. DHX49DE							+1ml 0057-031-4
24. DHX4DE							N/A
25. DHX4EE							
Reagents							Method
HNO3	3.5ml				6623 TDBAOS	7470A AutoCLAVE 15PSI 120°C	
H2SO4	5.0ml				5557 H21A13	SnCl2 = 0057-025-3	
KMNO4	15.0ml				0057-027-5	AcL.H2O4 = 0057-029-8	
K2S2O4	8.0ml				0057-027-6	WAH 8-31-00	
Extract(s)	Extract(s) Received			Extract(s) Relinquished			
(Record line number from above)	Date	Time	Analyst	Location	Date	Time	Analyst
44							
45							
51				WAH 8-31-00			

6691153

PSR024 8/21/00 2:42:28 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 003

REQUESTED BY: FAUSTG

METHO: QO Inductively Coupled Plasma (6010B)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
1A,B CLP1	DHX40	___	260365	399411	A-34-QO	COH160154	001		SOLID	0	3
1A,B CLP1	DHX47	___	260366	399411	A-34-QO	COH160154	002		SOLID	0	3
1A,B CLP1	DHX4A	___	260367	399411	A-34-QO	COH160154	003		SOLID	0	3
1E CLP1	DJ0QL	___	260368	399411	A-34-QO	COH170113	001		SOLID	0	3
2B CLP1	DJ401	___	260389	378644	I-05-QO	COH180213	001		WATER	0	5
2B CLP1	DJ40H	___	260390	378644	I-05-QO	COH180213	002		WATER	0	4
2B CLP1	DJ40M	___	260391	378644	I-05-QO	COH180213	003		WATER	0	1
2B CLP1	DJ412	___	260392	378644	A-46-QO	COH180213	004		SOLID	0	16
2B CLP1	DJ417	___	260393	378644	A-46-QO	COH180213	005		SOLID	0	10
2B CLP1	DJ430	___	260394	378644	I-05-QO	COH180213	007		WATER	0	12
2B CLP1	DJ43Q	___	260395	378644	I-05-QO	COH180213	008		WATER	0	1
2B CLP1	DJ43R	___	260396	378644	I-05-QO	COH180213	009		WATER	0	7
2B CLP1	DJ43X	___	260397	378644	I-05-QO	COH180213	010		WATER	0	1
2B CLP1	DJ44A	___	260398	378644	I-05-QO	COH180213	012		WATER	0	4
2B CLP1	DJ44J	___	260399	378644	I-05-QO	COH180213	013		WATER	0	1
2B CLP1	DJ45E	___	260400	378644	I-05-QO	COH180213	014		WATER	0	7
2B CLP1	DJ45M	___	260401	378644	I-05-QO	COH180213	015		WATER	0	1

6691154

PSR024 8/21/00 2:42:28 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 004

REQUESTED BY: FAUSTG

METHOD: Q0 Inductively Coupled Plasma (6010B)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>

RELINQUISHED BY

Jeffrey O. Grant
Jeffrey O. Grant

RECEIVED BY

Jeffrey O. Grant
Jeffrey O. Grant

DATE/TIME

8-21-00 0455
8-21-00 0625

***** END OF REPORT *****

6691155

PSRC24 8/17/00 6:45:43 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: MURPHYJ

METHOD: QO Inductively Coupled Plasma (6010B)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
1A,B CLP1	DHX40	___	259922	399411	A-34-QO	COH160154	001		SOLID	0	3
1A,B CLP1	DHX47	___	259923	399411	A-34-QO	COH160154	002		SOLID	0	3
1A,B CLP1	DHX4A	___	259924	399411	A-34-QO	COH160154	003		SOLID	0	3

RELINQUISHED BY

RECEIVED BY

DATE/TIME

Eusebio Faust
Jamaal Murphy

Jamaal Murphy
Eusebio Faust

8-17-00 1:00
8-17-00 1:30

***** END OF REPORT *****

REQUESTED BY: HOYLEW

METHOD: 08 Mercury (7470A, Cold Vapor) - Liquid

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
1A,B CLP1	DHX40	— — —	260311	399411	A-OM-08	COH160154	001		SOLID	0	3
									TCLP		1
1A,B CLP1	DHX47	— — —	260312	399411	A-OM-08	COH160154	002		SOLID	0	3
									LEACHATE		1
1A,B CLP1	DHX4A	— — —	260313	399411	A-OM-08	COH160154	003		SOLID	0	3
											1
1E CLP1	DJ00L	— — —	260314	399411	A-OM-08	COH170113	001		SOLID	0	3
	DJ3ACB										1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

William A HoyleWilliam A Hoyle8-21-00 06:30William A HoyleWilliam A Hoyle8-21-00 07:20

***** END OF REPORT *****

6691157

GENERAL CHEMISTRY DATA

UXB INTERNATIONAL

Client Sample ID: DF/S1/0228/SDC/026

General Chemistry

Lot-Sample #...: C0H160154-001 Work Order #...: DHX40 Matrix.....: SOLID
 Date Sampled...: 08/15/00 Date Received...: 08/16/00
 % Moisture.....: 20

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	8.1		No Units	SW846 9045C	08/16/00	0229262
		Dilution Factor: 1		MS Run #.....: 0229119		
Ignitability	NO	--	No Units	SW846 SECTION 7.1	08/16/00	0229248
		Dilution Factor: 1		MS Run #.....: 0229107		
Percent Solids	79.7		%	MCAWW 160.3 MOD	08/17-08/18/00	0230166
		Dilution Factor: 1		MS Run #.....: 0230059		
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	08/23/00	0236359
		Dilution Factor: 1		MS Run #.....: 0236168		
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	08/23/00	0236360
		Dilution Factor: 1		MS Run #.....: 0236169		

6691159

UXB INTERNATIONAL

Client Sample ID: DF/S1/0228/SDC/027

General Chemistry

Lot-Sample #...: C0H160154-002 Work Order #...: DHX47 Matrix.....: SOLID
 Date Sampled...: 08/15/00 Date Received...: 08/16/00
 % Moisture.....: 21

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	8.1		No Units	SW846 9045C	08/16/00	0229262
			Dilution Factor: 1	MS Run #.....: 0229119		
Ignitability	NO	--	No Units	SW846 SECTION 7.1	08/16/00	0229248
			Dilution Factor: 1	MS Run #.....: 0229107		
Percent Solids	79.0		%	MCAWW 160.3 MOD	08/17-08/18/00	0230166
			Dilution Factor: 1	MS Run #.....: 0230059		
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	08/23/00	0236359
			Dilution Factor: 1	MS Run #.....: 0236168		
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	08/23/00	0236360
			Dilution Factor: 1	MS Run #.....: 0236169		

UXB INTERNATIONAL

Client Sample ID: DF/S1/0228/SDC/028

General Chemistry

Lot-Sample #...: C0H160154-003 Work Order #...: DHX4A Matrix.....: SOLID
 Date Sampled...: 08/15/00 Date Received...: 08/16/00
 % Moisture.....: 15

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	8.1		No Units	SW846 9045C	08/16/00	0229262
			Dilution Factor: 1	MS Run #.....: 0229119		
Ignitability	NO	--	No Units	SW846 SECTION 7.1	08/16/00	0229248
			Dilution Factor: 1	MS Run #.....: 0229107		
Percent Solids	85.0		%	MCAWW 160.3 MOD	08/17-08/18/00	0230166
			Dilution Factor: 1	MS Run #.....: 0230059		
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	08/23/00	0236359
			Dilution Factor: 1	MS Run #.....: 0236168		
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	08/23/00	0236360
			Dilution Factor: 1	MS Run #.....: 0236169		

6691161

METHOD BLANK REPORT

General Chemistry

Client Lot #...: C0H160154

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>PREP</u> <u>BATCH #</u>
Reactive Cyanide	ND	Work Order #: DJA5N101 200	mg/kg	MB Lot-Sample #: SW846 7.3.3	A0H230000-359 08/23/00	0236359
		Dilution Factor: 1				

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results

METHOD BLANK REPORT

General Chemistry

Client Lot #...: COH160154

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>PREP</u> <u>BATCH #</u>
Reactive Sulfide	ND	Work Order #: DJA61101 200	mg/kg	MB Lot-Sample #: SW846 7.3.4	A0H230000-360 08/23/00	0236360
		Dilution Factor: 1				

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

6691163

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: C0H160154

Matrix.....: SOLID

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
pH	101	Work Order #: DHXDK101 (85 - 115)	LCS Lot-Sample#: C0H160000-262 SW846 9045C	08/16/00	0229262
		Dilution Factor: 1			

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results

6691165

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #....: C0H160154 Work Order #....: DHX4A-SMP Matrix.....: SOLID

DHX4A-DUP

Date Sampled....: 08/15/00

Date Received...: 08/16/00

% Moisture.....: 15

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD RPD	LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Reactive Cyanide	ND	ND	mg/kg	0.0	(0-20)	SD Lot-Sample #: C0H160154-003 SW846 7.3.3	08/23/00	0236359
Dilution Factor: 1								
Prep Date.....: 0236168 Analysis Date...: Prep Batch #....:								
Reactive Sulfide	ND	ND	mg/kg	0	(0-20)	SD Lot-Sample #: C0H160154-003 SW846 7.3.4	08/23/00	0236360
Dilution Factor: 1								
Prep Date.....: 0236169 Analysis Date...: Prep Batch #....:								

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: C0H160154

Work Order #...: DHX40-SMP
DHX40-DUP

Matrix.....: SOLID

Date Sampled...: 08/15/00

Date Received...: 08/16/00

% Moisture.....: 20

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	8.1	8.0	No Units	0.50	(0-20)	SD Lot-Sample #: C0H160154-001 SW846 9045C	08/16/00	0229262
Dilution Factor: 1								
Prep Date.....: 0229119 Analysis Date...: Prep Batch #...:								

Ignitability

						SD Lot-Sample #: C0H160154-001		
No Units	0	(0-0.0)	SW846	SECTION 7.1	08/16/00		0229248	
Dilution Factor: 1								
Prep Date.....: 0229107 Analysis Date...: Prep Batch #...:								

6691167

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: C0H160154

Work Order #...: DJ1MA-SMP
DJ1MA-DUP

Matrix.....: WATER

Date Sampled...: 08/16/00

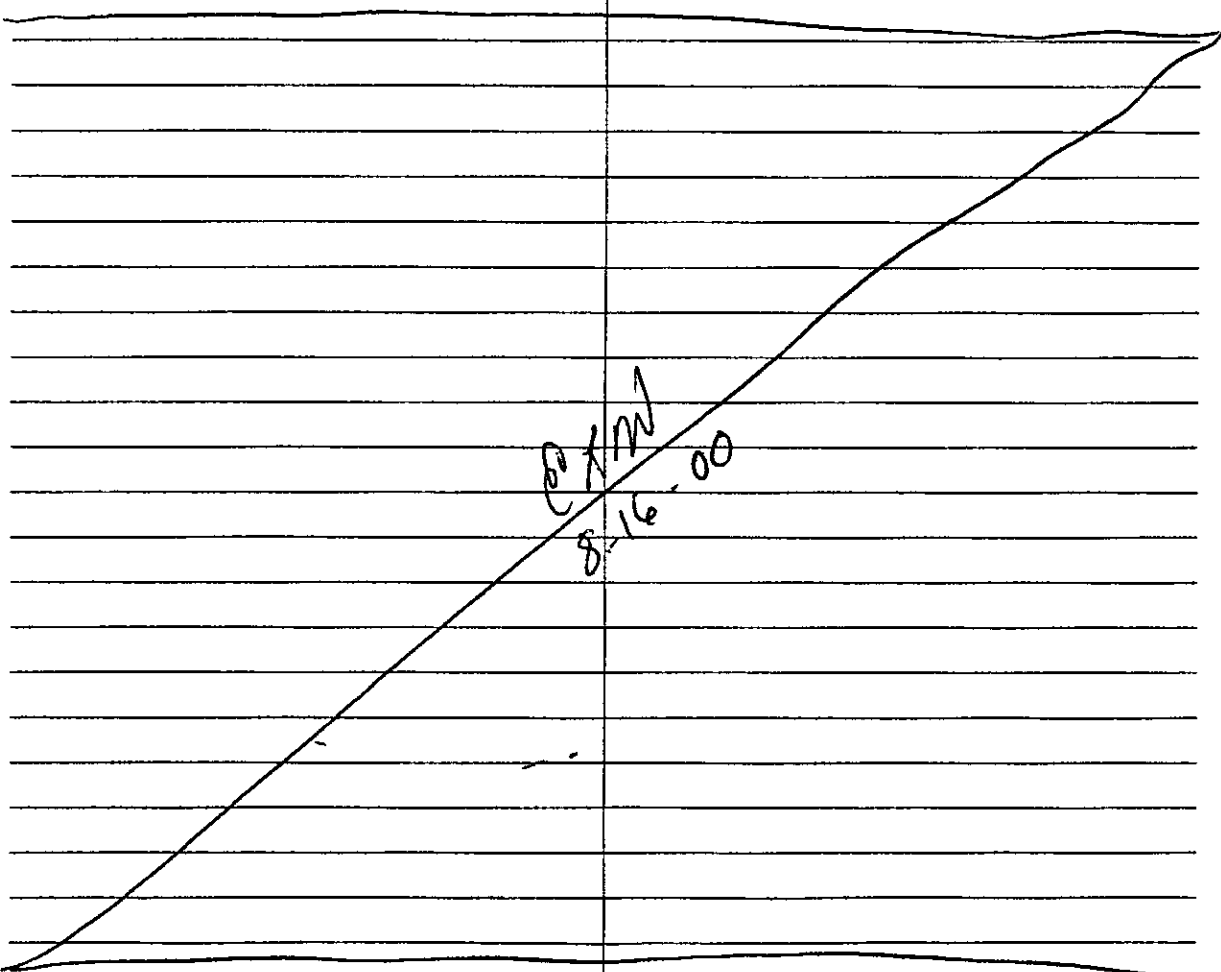
Date Received..: 08/17/00

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Reactive Cyanide	ND	ND	mg/kg	0.0	(0-20)	SD Lot-Sample #: A0H170197-007 SW846 7.3.3	08/23/00	0236359
			Dilution Factor: 1					
			Prep Date.....: 0236168 Analysis Date...: Prep Batch #....:					
Reactive Sulfide	ND	ND	mg/kg	0	(0-20)	SD Lot-Sample #: A0H170197-007 SW846 7.3.4	08/23/00	0236360
			Dilution Factor: 1					
			Prep Date.....: 0236169 Analysis Date..: Prep Batch #....:					

Ignitability

Method: IGNITABILITY (SW7.1.2)STL Pittsburgh
450 William Pitt Way
Pittsburgh, PA 15238

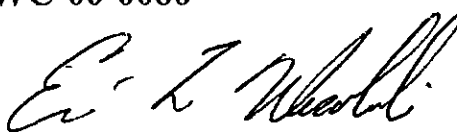
ANALYST: <u>Eric L. Wesolowski</u>	DATE: <u>8-16-00</u>
BATCH: <u>0229248</u>	TIME: <u>13:15</u>

SAMPLE ID	RESULT
<u>COH160154-001</u>	<u>NO</u>
<u>↓ -001 Dup</u>	<u>NO</u>
<u>-002</u>	<u>NO</u>
<u>↓ -003</u>	<u>NO</u>
	

Reviewed by E. L. Wesolowski Date 8-16-00

WC-00-0060

Page 7 of 100

 8/16/00

6691169

PSF024 8/16/00 11:03:51 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: MESOLOSE

METHOD: IQ Ignitability (SW7.1.2)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
1A,B CLP1	DHX4A-1-0G	— — —	259455	399411	A-88-IQ	COH160154	003		SOLID	3	1
1A,3 CLP1	DHX40-1-0G	— — —	259456	399411	A-88-IQ	COH160154	001		SOLID	3	1
1A,3 CLP1	DHX47-1-0G	— — —	259457	399411	A-88-IQ	COH160154	002		SOLID	3	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

C. T. Newbold
C. T. Newbold

C. T. Newbold
C. T. Newbold

8/16/00 (13:05)
8/16/00 (13:25)

***** END OF REPORT *****

STL Pittsburgh
pH LOG SHEET

Page ____ of ____

Lot No. COH160154 Batch No. 0229262 SDG No. ~~PH~~ 00
COH160267 0230098
COH160282

Analyst: Eric L. Wesolowski
 Date: 8-16-00
 Start Time: 13:30

pH Meter Calibration

Reading	Buffer	Manf. Lot No.	Rec'd	Expire
<u>4.00</u>	4.0	<u>LABCHEM 9167-08</u>	<u>5-19-00</u>	<u>6-25-01</u>
<u>7.01</u>	7.0	<u>0062-04</u>	<u>5-19-00</u>	<u>3-1-02</u>
<u>10.01</u>	10.0	<u>0047-16</u>	<u>5-19-00</u>	<u>3-8-02</u>

LCS ID No.: 342-162-3

Relative Percent Difference =
 $\frac{COH160267 - 007 - 0.23\%}{COH160154 - 001 - 0.5\%}$

Range = $\pm .05$ pH units

$$\frac{|X_1 - X_2|}{\left(\frac{X_1 + X_2}{2}\right)} \times 100$$

X_1 = Original Result
 X_2 = Duplicate

pH Liquid

Sample ID	pH Reading
LCS	7.02
COH160267-001	6.45
-002	6.29
-004	5.52
-005	6.86
-006	6.74
-007	6.32 RPD
-007 Dup	6.30 0.5%
-008	6.55
-009	6.47
-010	6.65
LCS	7.05
COH160267-011	5.88
-012	7.27
-013	7.32
-014	7.30
-015	5.87
COH160282-001	6.64
-002	6.84
LCS	7.05

EWJ 8-16-00

pH Solid

Sample ID	pH Reading
LCS	7.04
COH160154-001	8.08 RPD
-001 Dup	8.04 0.5%
-002	8.12
-003	8.11
LCS	7.05

EWJ 8-16-00

Eric L. Wesolowski
 8/16/00

6691171

PSR024 8/16/00 11:04:01 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: MESOLOSE

OD: OZ pH (9045C) - Non-Aqueous

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
1A,3 CLP1	DHX4A-1-OF	— — —	259458	399411	A-88-OZ	COH160154	003		SOLID	3	1
1A,B CLP1	DHX40-1-OF	— — —	259459	399411	A-88-OZ	COH160154	001		SOLID	3	1
1A,B CLP1	DHX47-1-OF	— — —	259460	399411	A-88-OZ	COH160154	002		SOLID	3	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

8/16/00 (13:05)
8/16/00 (13:30)

***** END OF REPORT *****

COC/Sample Request

Quanterra Incorporated
450 William Pitt Way
Building 6, Third Floor
Pittsburgh, Pennsylvania 15238
412/826-5477 FAX. 412/826-5571

JA-4186

Project Name		Site
IT Honeywell		
Lot Number/Sample Number	Analysis	Matrix
1 PW1	D/H Water	H ₂ O
2 PW2		
3 EB-2		
4 PW-4		
5 MW-2		
6 MW-9		
7 MW-9 DUP		
8 MW-21		
9 MW-22		
10 MW-29		
11 ITMW		
12 NMW-1A		
13 NMW-1B		
14 NMW-1A-1		
15 EB-1		
16 OW-7		
17 FPW-1		
18.		
19		
20		
21.		
22.		
23		
24		
25		
26.		
27.		
28		
29		
30		

Raw Sample (Record line number from above)	Raw Relinquished by				Raw Received by			
	Date	Time	Analyst	Location	Date	Time	Analyst	Location
1-17	8-16-00	16:30	Kimberly Hall	SR	8-16-00	16:30	Kimberly Hall	WTC Hm
1-17	8-16-00	17:20	Kimberly Hall	WTC Hm	8-16-00	17:20	Kimberly Hall	SR

6691173

STL - Pittsburgh WATER CONTENT SHEET

TEST NUM 0008013
 TESTED: CLL 8/17/00
 CHECKED: *g. 1800*

CREATED: 8/17/00 11:06 25 AM

REVISED: 8/17/00 11:17:36 AM

COMMENTS:

COH150122 COH160135 COH160137 COH160182 COH160154 COH150128 COH150133 COH150136 COH170113

CLIENT SAMPLE IDENTIFICATION	LAB SAMP IDENT.		TARE NO.	WEIGHT TARE	WEIGHT TARE + WET SMP	WEIGHT TARE + DRY SAMP	TIME IN	TIME OUT	WEIGHT WATER	WATER CONTENT CALC.	SOLIDS CONTENT CALC.
COH150122	001	SMP	1551	1.11	6.03	4.82	10:45	5:00	1.21	24.593 ✓ <i>RP 4.2%</i>	75.407
COH150122	001D	SMP	361	1.12	6.19	4.89	10:45	5:00	1.3	25.641 ✓	74.359
COH150122	002	SMP	HB	1.15	6.21	4.94	10:45	5:00	1.27	25.099 ✓	74.901
COH160135	001	SMP	42	1.13	6.96	6.21	10:45	5:00	0.75	12.864 ✓	87.136
COH160135	002	SMP	123	1.14	6.38	5.69	10:45	5:00	0.69	13.168 ✓	86.832
COH160137	001	SMP	231	1.12	6.59	5.91	10:45	5:00	0.68	12.431 ✓ <i>RP 5.2%</i>	87.569
COH160137	001D	SMP	12	1.12	6.46	5.83	10:45	5:00	0.63	11.798 ✓	88.202
COH160182	001	SMP	29	1.11	6.34	5.62	10:45	5:00	0.72	13.767 ✓	86.233
COH160182	002	SMP	149	1.12	8.01	6.94	10:45	5:00	1.07	15.53 ✓	84.47
COH160182	003	SMP	141	1.18	6.19	5.29	10:45	5:00	0.9	17.964 ✓	82.036
COH160182	004	SMP	1241	1.11	9.26	8.14	10:45	5:00	1.12	13.742 ✓	86.258
COH160182	005	SMP	AB	1.11	7.12	6.15	10:45	5:00	0.97	16.14 ✓	83.86
COH160182	006	SMP	171	1.13	8.44	7.36	10:45	5:00	1.08	14.774 ✓	85.226
COH160182	007	SMP	64	1.12	6.18	5.03	10:45	5:00	1.15	22.727 ✓	77.273
COH160182	008	SMP	1151	1.11	5.95	5.1	10:45	5:00	0.85	17.562 ✓	82.438
COH160182	009	SMP	48	1.12	6.07	5.21	10:45	5:00	0.86	17.374 ✓	82.626
COH160182	010	SMP	38	1.14	6.72	5.41	10:45	5:00	1.31	23.477 ✓	76.523
COH160182	011	SMP	150	1.24	6.58	5.74	10:45	5:00	0.84	15.73 ✓	84.27

STL - Pittsburgh WATER CONTENT SHEET

IEET NUM 0008013
 TESTED CLL 8/17/00
 CHECKED. 19 8.1300
 COMMENTS.

CREATED: 8/17/00 11:06:25 AM

REVISED: 8/17/00 11:17:36 AM

COH150122 COH160135 COH160137 COH160182 COH160154 COH150128 COH150133 COH150136 COH170113

CLIENT SAMPLE IDENTIFICATION	LAB SAMP IDENT.		TARE NO.	WEIGHT TARE	WEIGHT TARE + WET SMP	WEIGHT TARE + DRY SAMP	TIME IN	TIME OUT	WEIGHT WATER	WATER CONTENT CALC.	SOLIDS CONTENT CALC.
COH160182	012	SMP	28	1.09	6.36	5.6	10:45	5:00	0.76	14.421	85.579
COH160154	001	SMP	25	1.12	6.04	5.04	10:45	5:00	1	20.325	79.675
COH160154	002	SMP	PU	1.13	6.17	5.11	10:45	5:00	1.06	21.032	78.968
COH160154	003	SMP	47	1.14	6.47	5.67	10:45	5:00	0.8	15.009	84.991
COH150128	001	SMP	148	1.21	6.19	5.26	10:45	5:00	0.93	18.675	81.325
COH150128	002	SMP	158	1.13	6.65	5.67	10:45	5:00	0.98	17.754	82.246
150128	003	SMP	104	1.18	6.4	5.34	10:45	5:00	1.06	20.307	79.693
COH150128	004	SMP	174	1.12	6.33	5.17	10:45	5:00	1.16	22.265	77.735
COH150133	001	SMP	81	1.13	6.41	5.42	10:45	5:00	0.99	18.75	81.25
COH150133	002	SMP	120	1.13	6.24	5.2	10:45	5:00	1.04	20.352	79.648
COH150136	001	SMP	1108	1.14	6.17	5.29	10:45	5:00	0.88	17.495	82.505
COH150136	002	SMP	101	1.11	6.54	5.96	10:45	5:00	0.58	10.681	89.319
COH150136	003	SMP	1291	1.14	6.77	5.78	10:45	5:00	0.99	17.584	82.416
COH150136	004	SMP	145	1.14	6.46	5.87	10:45	5:00	0.59	11.09	88.91
COH150136	004D	SMP	157	1.14	6.39	5.81	10:45	5:00	0.58	11.048	88.952
COH150136	005	SMP	135	1.14	7.06	6.11	10:45	5:00	0.95	16.047	83.953
COH150136	006	SMP	119	1.13	6.46	5.83	10:45	5:00	0.63	11.82	88.18
COH150136	007	SMP	66	1.14	6.65	6.1	10:45	5:00	0.55	9.982	90.018

6691175

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM 0008013
 TESTED: CLL 8/17/00
 CHECKED: [Signature] 8/18/00
 COMMENTS: [Signature]
 COH150122 COH150135 COH160137 COH160182 COH160154 COH150128 COH150133 COH150136 COH170113

CREATED: 8/17/00 11:06 25 AM

REVISED: 8/17/00 11:17.36 AM

CLIENT SAMPLE IDENTIFICATION	LAB SAMP IDENT.	TARE NO	WEIGHT TARE	WEIGHT TARE + WET SMP	WEIGHT TARE + DRY SAMP	TIME IN	TIME OUT	WEIGHT WATER	WATER CONTENT CALC.	SOLIDS CONTENT CALC.	
COH-150136	008	SMP	C	1.13	6.47	5.53	10.45	5:00	0.94	17.603	82.397
COH150136	009	SMP	181	1.12	6.86	6.24	10.45	5:00	0.62	10.801	89.199
COH150136	010	SMP	1651	1.12	6.74	5.78	10:45	5:00	0.96	17.082	82.918
COH150136	011	SMP	BB	1.13	6.53	5.91	10:45	5:00	0.62	11.481	88.519
COH-70113	001	SMP	V	1.12	6.33	5.3	11:00	5:00	1.03	19.77	80.23
COH170113	001D	SMP	111	1.14	6.63	5.53	11:00	5:00	1.1	20.036	79.964

STL Pittsburgh
TOTAL SOLIDS/PERCENT MOISTURE LOG SHEET

Lot No.	Lot No.	Lot No.	Batch No.	Analyst: <u>C. L. Lohmeyer</u>
<u>COH150122</u>	<u>COH150128</u>	<u> </u>	<u>0230161</u>	In: Date <u>8-17-00</u> Time <u>1045</u>
<u>COH160135</u>	<u>COH150133</u>	<u> </u>	<u>0230162</u>	Out: Date <u>8-18-00</u> Time <u>0500</u>
<u>COH160137</u>	<u>COH150136</u>	<u> </u>	<u>0230166</u>	Balance ID #: <u>C94817</u>
<u>COH160182</u>	<u>COH170113</u>	<u> </u>	<u>0230171</u>	Oven Temp: <u>103°C ± 2°C</u>
<u>COH160154</u>	<u> </u>	<u> </u>	<u> </u>	

SAMPLE ID	TARE NO.	TARE	SAMPLE + TARE	DRIED SAMPLE + TARE	SAMPLE ID	TARE NO.	TARE	SAMPLE + TARE	DRIED SAMPLE + TARE
COH150122-001	1551	1.11	6.03	4.82	COH150136-008	C	1.13	6.47	5.53
-001D	361	1.12	6.19	4.89	-009	181	1.12	6.86	6.24
-002	HB	1.15	6.21	4.94	-010	1651	1.12	6.74	5.78
COH160135-001	42	1.13	6.96	6.21	-011	BB	1.13	6.53	5.91
-002	123	1.14	6.38	5.69	COH170113-001	V	1.12	6.33	5.30
COH160137-001	231	1.12	6.59	5.91	-001D	111	1.14	6.63	5.53
-001D	12	1.12	6.46	5.83					
COH160182-001	29	1.11	6.34	5.62					
-002	149	1.12	8.01	6.94					
-003	141	1.18	6.19	5.29					
-004	1241	1.11	9.26	8.14					
-005	AB	1.11	7.12	6.15					
-006	171	1.13	8.44	7.36					
-007	64	1.12	6.18	5.03					
-008	1151	1.11	5.95	5.10					
-009	48	1.12	6.07	5.21					
-010	38	1.14	6.72	5.41					
-011	150	1.24	6.58	5.74					
-012	28	1.09	6.36	5.60					
COH160154-001	25	1.12	6.04	5.04					
-002	PL	1.13	6.17	5.11					
-003	47	1.14	6.47	5.67					
COH150128-001	148	1.21	6.19	5.26					
-002	158	1.13	6.65	5.67					
-003	104	1.18	6.40	5.34					
-004	174	1.12	6.33	5.17					
COH150133-001	81	1.13	6.41	5.42					
-002	120	1.13	6.24	5.20					
COH150136-001	1108	1.14	6.17	5.29					
-002	101	1.11	6.54	5.96					
-003	1291	1.14	6.77	5.78					
-004	145	1.14	6.46	5.87					
-004D	157	1.14	6.39	5.81					
-005	135	1.14	7.06	6.11					
-006	119	1.13	6.46	5.83					
-007	66	1.14	6.65	6.10					

REQUESTED BY: LOHEYDEC

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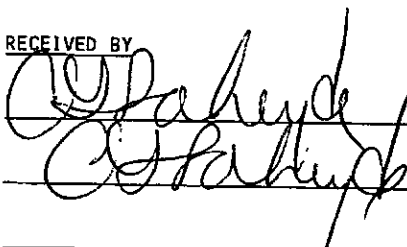
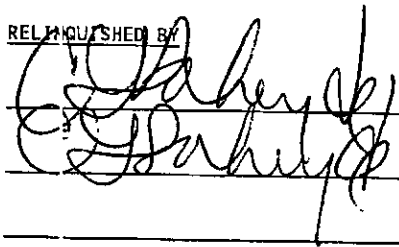
400: OV Moisture, Percent (CLP)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
22C	DHV1N-1-01	— — —	259861	419371	A-88-OV	COH150122	001		SOLID	1	1
22C	DHV1P-1-01	— — —	259862	419371	A-88-OV	COH150122	002		SOLID	1	1

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8-17-00 0830
8-17-00 1100

***** END OF REPORT *****

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MOD: WM Moisture, Percent (160.3)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
1A	DHWVE-1-01	___	259863	413462	A-88-WM	COH160135	002		SOLID	1	1
1A	DHWVQ-1-01	___	259864	413462	A-88-WM	COH160137	001		SOLID	1	1
1A	DHWV1-1-01	___	259865	413462	A-88-WM	COH160135	001		SOLID	1	1
1A,B CLP1	DHXAA-1-02	___	259866	094490	A-88-WM	COH160182	005		SOLID	4	1
1A,B CLP1	DHXAC-1-02	___	259867	094490	A-88-WM	COH160182	006		SOLID	4	1
1A,B CLP1	DHXAE-1-02	___	259868	094490	A-88-WM	COH160182	007		SOLID	4	1
1A,B CLP1	DHXAF-1-02	___	259869	094490	A-88-WM	COH160182	008		SOLID	4	1
1A,B CLP1	DHXAK-1-02	___	259870	094490	A-88-WM	COH160182	009		SOLID	4	1
1A,B CLP1	DHXAT-1-02	___	259871	094490	A-88-WM	COH160182	010		SOLID	4	1
1A,B CLP1	DHXAX-1-02	___	259872	094490	A-88-WM	COH160182	011		SOLID	4	1
1A,B CLP1	DHXA5-1-02	___	259873	094490	A-88-WM	COH160182	002		SOLID	4	1
1A,B CLP1	DHXA7-1-02	___	259874	094490	A-88-WM	COH160182	003		SOLID	4	1
1A,B CLP1	DHXA8-1-02	___	259875	094490	A-88-WM	COH160182	004		SOLID	4	1
1A,B CLP1	DHXC4-1-02	___	259876	094490	A-88-WM	COH160182	012		SOLID	4	1
1A,B CLP1	DHX9X-1-02	___	259877	094490	A-88-WM	COH160182	001		SOLID	4	1

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***** END OF REPORT *****

REQUESTED BY: LOHEYDEC

MOD: SM Solids, Percent (as TS - 160 3 MOD) - Solids

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
S13D,S14E	DJ0FR-1-01	___	259921	131369	A-88-SM FOH160319	005			SOLID	6	1
1A,B	DHXEC-1-01	___	259903	051465	A-88-SM COH160192	001			SOLID	1	1
1A,3	DHXEJ-1-01	___	259904	051465	A-88-SM COH160192	002			SOLID	1	1
1A,B	DHXET-1-01	___	259905	051465	A-88-SM COH160192	003			SOLID	1	1
1A,B	DHXFA-1-01	___	259906	051465	A-88-SM COH160192	009			SOLID	1	1
1A,E	DHXFC-1-01	___	259907	051465	A-88-SM COH160192	010			SOLID	1	1
1A,E	DHXFE-1-01	___	259908	051465	A-88-SM COH160192	011			SOLID	1	1
1A,E	DHXFF-1-01	___	259909	051465	A-88-SM COH160192	012			SOLID	1	1
1A,E	DHXFH-1-01	___	259910	051465	A-88-SM COH160192	013			SOLID	1	1
1A,B	DHXFJ-1-01	___	259911	051465	A-88-SM COH160192	014			SOLID	1	1
1A,B	DHXFL-1-01	___	259912	051465	A-88-SM COH160192	015			SOLID	1	1
1A,B	DHXFO-1-01	___	259913	051465	A-88-SM COH160192	004			SOLID	1	1
1A,B	DHXF1-1-01	___	259914	051465	A-88-SM COH160192	005			SOLID	1	1
1A,B	DHXF3-1-01	___	259915	051465	A-88-SM COH160192	006			SOLID	1	1
1A,B	DHXF4-1-01	___	259916	051465	A-88-SM COH160192	007			SOLID	1	1
1A,B	DHXF6-1-01	___	259917	051465	A-88-SM COH160192	008			SOLID	1	1
1A,B CLP1	DHXDA-1-01	___	259895	051465	A-88-SM COH160189	001			SOLID	3	1
1A,B CLP1	DHXDG-1-01	___	259896	051465	A-88-SM COH160189	002			SOLID	3	1
1A,B CLP1	DHXDH-1-01	___	259897	051465	A-88-SM COH160189	003			SOLID	3	1
1A,B CLP1	DHXDL-1-01	___	259898	051465	A-88-SM COH160189	004			SOLID	3	1
1A,B CLP1	DHXDP-1-01	___	259899	051465	A-88-SM COH160189	005			SOLID	3	1
1A,B CLP1	DHXDT-1-01	___	259900	051465	A-88-SM COH160189	006			SOLID	3	1
1A,B CLP1	DHXDV-1-01	___	259901	051465	A-88-SM COH160189	007			SOLID	3	1
B CLP1	DHXDX-1-01	___	259902	051465	A-88-SM COH160189	008			SOLID	3	1
1A,B CLP1	DHX4A-1-01	___	259918	399411	A-88-SM COH160154	003			SOLID	3	1
1A,B CLP1	DHX40-1-01	___	259919	399411	A-88-SM COH160154	001			SOLID	3	1

REQUESTED BY: LONEYDEC

MOD: SM Solids, Percent (as TS - 160.3 MOD) - Solids

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
1A,B CLP1	DHX47-1-01	___	259920	399411	A-88-SM	COH160154	002		SOLID	3	1
22C CLP1	DHV24-1-02	___	259878	375241	A-88-SM	COH150128	001		SOLID	2	1
22C CLP1	DHV3Q-1-02	___	259879	375241	A-88-SM	COH150128	002		SOLID	2	1
22C CLP1	DHV3R-1-02	___	259880	375241	A-88-SM	COH150128	003		SOLID	2	1
22C CLP1	DHV3T-1-02	___	259881	375241	A-88-SM	COH150128	004		SOLID	2	1
22C CLP1	DHV4G-1-02	___	259882	375241	A-88-SM	COH150133	001		SOLID	2	1
22C CLP1	DHV4J-1-02	___	259883	375241	A-88-SM	COH150133	002		SOLID	2	1
22C,D CLP1	DHV4Q-1-01	___	259884	051465	A-88-SM	COH150136	001		SOLID	3	1
22C,D CLP1	DHV5C-1-01	___	259885	051465	A-88-SM	COH150136	003		SOLID	3	1
22C,D CLP1	DHV5E-1-01	___	259886	051465	A-88-SM	COH150136	004		SOLID	9	1
22C,D CLP1	DHV5J-1-01	___	259887	051465	A-88-SM	COH150136	005		SOLID	3	1
22C,D CLP1	DHV5K-1-01	___	259888	051465	A-88-SM	COH150136	006		SOLID	3	1
22C,D CLP1	DHV5M-1-01	___	259889	051465	A-88-SM	COH150136	007		SOLID	3	1
22C,D CLP1	DHV5Q-1-01	___	259890	051465	A-88-SM	COH150136	008		SOLID	3	1
22C,D CLP1	DHV5T-1-01	___	259891	051465	A-88-SM	COH150136	009		SOLID	3	1
22C,D CLP1	DHV5X-1-01	___	259892	051465	A-88-SM	COH150136	010		SOLID	3	1
22C,D CLP1	DHV58-1-01	___	259893	051465	A-88-SM	COH150136	002		SOLID	3	1
22C,D CLP1	DHV60-1-01	___	259894	051465	A-88-SM	COH150136	011		SOLID	3	1

REQUESTED BY: LOHEYDEC

400: SM Solids, Percent (as TS - 160.3 MOD) - Solids

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>

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8-17-00 0830
8-17-00 1100

***** END OF REPORT *****

REQUESTED BY: LONEYDEC

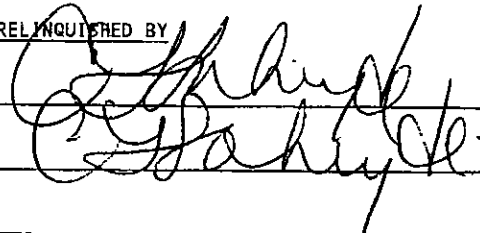
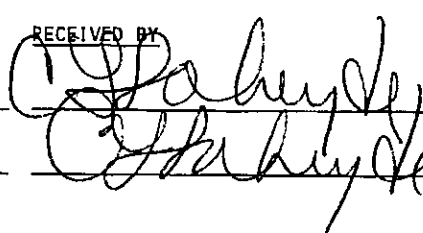
'OD: SM Solids, Percent (as TS - 160.3 MOD) - Solids

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
										RCVD	REQD
1E CLP1	DJ0QL-1-01	— — —	259936	399411	A-88-SM	COH170113	001		SOLID	3	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

		8-17-00 1100
		8-17-00 1115

***** END OF REPORT *****

Analysis Reactive S⁻²
 Prep/ Anal. Date 8-23-00
 Analyst TAR

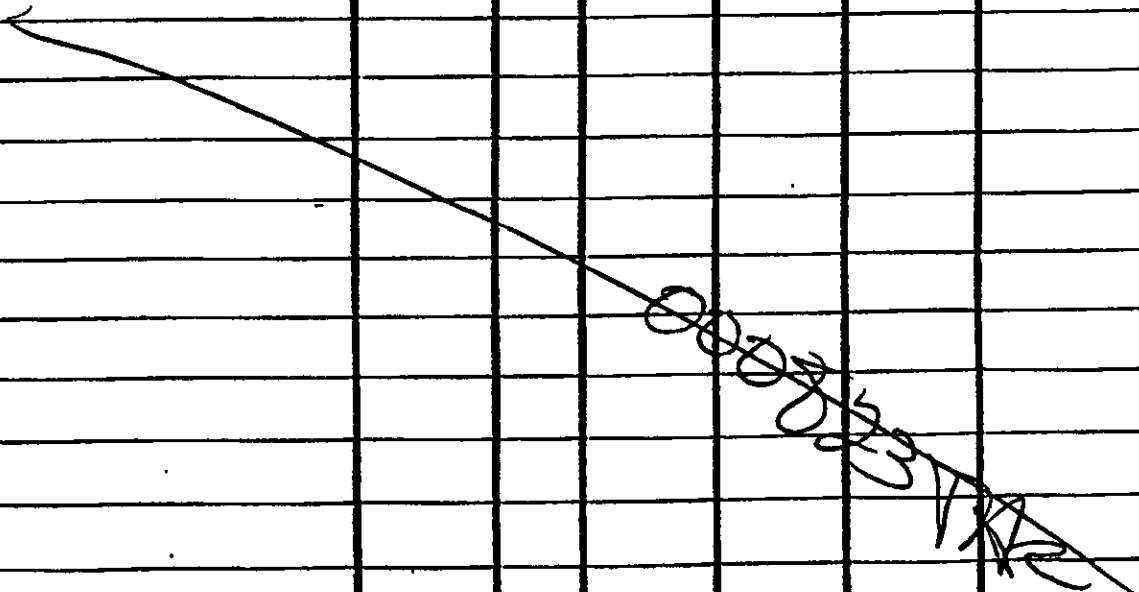
Batch Number 0236360
 LCS Number
 LCS Prep Date
 RL 200mg/kg

Titrant Name Sodium Sulfate

Titrant Normality 0.25 N

Titrant Standardization Date/ Initials 8-22-00 TAR

Iodine
.028125
8-16-00 CLK

Sample Number	Sample Volume	Dil.	Titrant Vol (mL)	Final Conc.	Units	QC Calculations and Comments
BK	10g		21.0	ND	mg/kg	
DJMA			21.0			
DJMA dup			21.0			
DHX40			20.1			
DHX47			20.2			
DHX4A			20.2			
DHX4A dup			20.5			
						

QUANTERRA- NORTH CANTON
TITRIMETRIC LOGSHEET

6691184

Analysis Reactive Cu-
Prep/ Anal. Date 8-23-00
Analyst TAR

Batch Number 0236359
LCS Number
LCS Prep Date
RL 200 mg/kg

Titrant Name Silver Nitrate
Titrant Normality .0192
Titrant Standardization Date/ Initials 8-23-00 / TAR

Sample Number	Sample Volume	Dil.	Titrant Vol (mL)	Final Conc.	Units	QC Calculations and Comments
BLK	10g		.05	6.25	mg/kg	
DTMA			.05			
DTMA dup			.05			
DHX40			.05			
DHX47			.05			
DHX4A			.05			
DHX4A dup			.05			
~~DO NOT WRITE BELOW THIS LINE~~						

FINAL PAGE

ADMINISTRATIVE RECORD

FINAL PAGE